DOCUMENT RESUME

ED 107 015 95 EC 072 483

AUTHOR Sylves, David, Ed.; Sardina, Kathleen, Ed.
TITLE Sesame and You, Two--A Teacher's Helper: A Revised Guide to Accompany a Videotape Package of Twenty Sesame Street Mini Shows.
INSTITUTION State Univ. of New York, Buffalo. Coll. at Buffalo. Faculty of Professional Studies.
SPONS AGENCY Office of Education (DHEW), Washington, D.C.
PUB DATE 74
NOTE 248p.

EDRS PRICE MF-$0.76 HC-$12.05 PLUS POSTAGE
DESCRIPTORS *Aurally Handicapped; *Class Activities; Cognitive Processes; Daily Living Skills; *Early Childhood Education; Exceptional Child Education; Instructional Materials; Reading Readiness; Social Development; *Teaching Guides; *Video Tape Recordings
IDENTIFIERS *Sesame Street

ABSTRACT

The teaching guide is intended to accompany a videotape package of 20 Sesame Street Mini Shows selected for their relevance to the education of young hearing impaired children. Individually described are segments of each Mini Show in terms of a description, captions, general objective, specific objectives, necessary preteaching, and related activities and materials (coded to the appendixes). Appended are brief descriptions of 127 activities concerned with symbolic representation, 99 activities focusing on cognitive processes, 120 activities about the physical environment, and 19 activities on the social environment. Also appended are brief descriptions (including age level, cost, and source) of a total of 355 instructional materials by activity categories, an alphabetical listing of publishers and distributors, the lesson plan for a demonstration class recorded on tape, and a reference grid relating instructional objectives to Mini Show segments and activities and materials. (DB)

ED107015

SESAME AND YOU, *TWO*

--A TEACHER'S HELPER

A Revised Guide to Accompany a
Videotape package of
Twenty Sesame Street Mini Shows

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Edited by:
David Sylves, *Project Coordinator*
Kathleen Sardina, *Project Associate*

RESEARCH AND DEVELOPMENT COMPLEX
Dr. Kenneth Cross, Director

Faculty of Professional Studies
State University College at Buffalo
1300 Elmwood Avenue
Buffalo, New York 14222

in cooperation with
St. Mary's School for the Deaf

Financed through a Federal Grant under
Public Law 89-313

1974

EC 072 483

E 1 2/3

INTRODUCTION

Sesame Street is fun to watch. In addition, children can learn while viewing the show. Let's take advantage of both facts.

This educational package, which includes the twenty-one video tapes as well as this guide, is predicated on those two concepts. While developing the package, the project participants also kept in mind the following:

1. This package in no way supplants any curriculum. It was, however, designed to supplement any curriculum.

2. Multiple educational objectives for each segment were selected by teachers of the deaf to indicate reasons why that segment might be employed. That many of the segments might be viewed by the same students on several different occasions for several different purposes cannot be over-emphasized.

   Because of their motivational qualities, the segments on the Mini Shows are useful for introducing material and to focus attention. Because of their brevity, the segments and/or the Mini Shows can be repeatedly viewed for drill and reinforcement. Because of their intrinsic interest, they can successfully be used as a culminating activity or for review.

   In addition to these purposes, one must also remember that often the same segment might be used for social studies, and for math, and for reading and for language, etc.

3. Even though the Mini Shows were designed to help children attain specific educational objectives, the children should be allowed to watch the Mini Shows just for enjoyment. We believe we have an obligation to help children enjoy school; besides, the serendipity is worthwhile.

User's Guide

When you have planned what you are to teach your students, refer to Appendix E at the end of the manual. In it, objectives are listed with the identification of each of the segments which might be used for the attainment of that objective. (E.g., (6-4) identifies Mini Show #6, Segment 4)

After noting which objectives in the manual are similar to those desired for your class, refer to the appropriate Mini Show(s) in this manual. Each Mini Show contains a brief description of the Mini Show, its length, and a list of which segments, if any, contain captions. For each of the segments there is a description, specific captions (if any), a list of general and specific objectives, necessary pre-teaching, and a graph of Related Activities and Related Materials.

The Related Activities and Related Materials refer to Appendix A and B respectively. The graph simply codes the objectives in the segment to appropriate activities and materials. For example, note the following graph extracted from Mini Show 4/Segment 2:

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 16-19/96-97 A-4, 1-6	B-2, 15-19/101 B-4, 1-8

Activities 16-19 and 96-97 in Appendix A-2 (Cognitive Processes), and Activities 1-6 found in Appendix A-4 (The Social Environment), are those relevant to Mini Show 4/Segment 2. Materials 15-19 and 101 in Appendix B-2 (Cognitive Processes), as well as Materials 1-8 found in Appendix B-4 (The Social Environment), are relevant to Mini Show 4/Segment 2. In other words the underscored letter and number refers to the Appendix and the following number(s) refer to the activities/materials that were selected as relevant for each Mini Show.

The Activities and Materials that are included in the Manual are versatile and can be used for many objectives other than those for which they are coded. It should be stressed that although they are isolated for each objective, the teacher need not restrict herself to that particular section. Instead, it is recommended that she review the activities and materials for the needs of her particular class.

Appendix C is an alphabetical listing of Publishers and Distributors that have been cited for all of the related materials used in Appendix B.

Appendix D - "Demonstration Class" refers to the accompanying videotape in the package and is an example of how one teacher successfully used some Sesame Street segments.

For those teachers who would like to include fingerspelling in their curriculum, two Mini Shows - 4a and 18a have fingerspelling modifications included. For those schools who do not have these two Mini Shows, a copy is available at the Research and Development Complex at the State University College at Buffalo.

These are but guides and suggestions. Undoubtedly you can think of many more innovative uses, activities, and materials related to each of the segments. In fact, your comments in reference to additions or modifications to this manual are graciously requested.

These segments were selected by teachers of the deaf and the original manual was generated as a result of the 1971 summer workshop involving the following teachers:

NAME	SCHOOL	NAME	SCHOOL
Ms. Phyllis Bergstrasser	Rochester	Ms. Marlene Miller	Mill Neck
Ms. Eileen Connally	Lexington	Ms. Susan Reilly	St. Francis
Sr. Katherine Costello	St. Francis	Ms. Karen Singer	St. Joseph
Mr. George Eddington	Lexington	Ms. Penny Socher	Lexington
Ms. Joan Harlow	St. Joseph	Ms. Judy Spring	St. Mary's
Ms. Laurie Holcomb	Rochester	Ms. Margaret Stahl	Cleary
Ms. Arlene Kadish	White Plains	Ms. Virginia Franzen	Mill Neck
Ms. Hannah Manshel	White Plains	Ms. Nancy Wolf	St. Mary's

Contributions that led to the revision of the original manual were made the following teachers:

NAME	SCHOOL	NAME	SCHOOL
Sr. Maura Costello	Cleary	Ms. Carl Lee Cameron	St. Francis
Ms. Joanne Enterlin	Cleary	Sr. Katherine Costello	St. Francis
Ms. Joan Hebert	Cleary	Ms. Susan Martello	St. Francis
Ms. Diana McCabe	Cleary	Mr. Leonard Novick	St. Francis
Ms. Patricia Olsen	Cleary	Ms. Katherine Eschbach	St. Joseph
Mr. Lloyd Anderson	Mill Neck	Ms. Priscilla Hellman	St. Joseph
Ms. Patricia Finnerty	Mill Neck	Ms. Mona Lanzer	St. Joseph
Ms. Virginia Franzen	Mill Neck	Ms. Constance Lumia	St. Joseph
Ms. Ann Parker	Mill Neck	Ms. Therese O'Connor	St. Joseph
Ms. Katharine Sisti	Mill Neck	Ms. Linda Viscusi	St. Joseph
Mr. Brian Sosnowski	Mill Neck	Ms. Judith Embree	St. Mary's
Ms. Susan Widler	Mill Neck	Ms. Patricia Hart	St. Mary's
Ms. Elsie Herden	Rochester	Sr. Theresa Moore	St. Mary's
Mr. Garry Loysen	Rochester	Ms. Joan Szarowicz	St. Mary's
Ms. Rebecca Michalovic	Rochester	Ms. Abby Asbell	White Plains
Ms. Michelle Nesbit	Rochester	Ms. Rita Delgado	White Plains
Ms. Eleanor Scouten	Rochester	Ms. Lesley Graham	White Plains
Ms. Karen Wissman	Rochester	Ms. Evelyn Grossi	White Plains
Mr. Carl Alberico	Rome	Ms. Elizabeth Kelly	White Plains
Mr. Peter Giachetti	Rome	Ms. Rosemarie Marino	White Plains
Ms. Mary Alyce Holmes	Rome	Ms. Katheryn Ritchie	White Plains
Ms. Linda Marocchi	Rome	Ms. Gail Ryan	White Plains
Ms. Mary Burke	St. Francis	Ms. Karen Tortora	White Plains

TABLE OF CONTENTS

	Page
Introduction	
Mini Show #1	1
Mini Show #2	5
Mini Show #3	10
Mini Show #4	13
Mini Show #4a	17
Mini Show #5	18
Mini Show #6	22
Mini Show #7	25
Mini Show #8	28
Mini Show #9	32
Mini Show #10	35
Mini Show #11	39
Mini Show #12	42
Mini Show #13	46
Mini Show #14	49
Mini Show #15	53
Mini Show #16	56
Mini Show #17	60
Mini Show #18	65
Mini Show #18a	69
Mini Show #19	70
Mini Show #20	74
Appendix A (Related Activities)	
Appendix B (Related Materials)	
Appendix C (List of Publishers and Distributors)	
Appendix D (Demonstration Class)	
Appendix E (Objectives Grid)	

SESAME STREET MINI SHOW NO. 1

Length - 15:15 *Number of Segments - 4*

General Description - Includes letters segment, classification exercise, problem solving (Buddy and Jim) segment and an environmental film "Wheels".

Captions - exist in Segment 1

MINI SHOW 1/SEGMENT 1

Description - This segment is introduced by Gordon, Bob and a child in the kitchen of Gordon's home. Bob folds a one dollar bill into the shape of a letter "W". This is followed by a captioned cartoon "Wanda the Witch", and a commercial given by Kermit the frog on "W" during which the Cookie Monster transforms the W into other letters. Wanda the Witch is then repeated, and a very brief captioned cartoon is included before the second commercial by Kermit in which the styrofoam W is animated.

Captions - *Wanda the Witch, west, Washington, Wednesday, well, washtub, wheel, wind, wig, worm, walrus, water.*

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

Given a set of symbols, either all letters or all numbers, the child knows whether those symbols are used in reading or in counting.

Given a printed letter the child can select the identical letter from a set of printed letters.

Given a verbal label for certain letters the child can select the appropriate letter from a set of printed letters.

Given a printed letter the child can provide the verbal label.

Given a series of words presented orally, all beginning with the same letter, the child can make up another word or pick another word starting with the same letter.

Given a spoken letter the child can select a set of pictures or objects beginning with that letter.

The child will be able to form such basic symbols as letters.

The child can recognize and identify such basic symbols as letters by touch alone.

Necessary Pre-teaching

-pre-school - introduce letter W.
-primary - introduce vocabulary or a selection from the vocabulary to the children in accordance to their reading level.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 1-7/12-31/ 37-47	B-1, 1-6/11-25/ 30-39

MINI SHOW 1/SEGMENT 2

Description - Susan is in yard with 2 children and introduces a discrimination game in which the children are to select the "different" item from a group of 3 and explain why it is different. The sets are (1) kittens (2) dolls (3) sneakers.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Given four objects, three of which have an attribute in common, the child can sort out the in appropriate object on the basis of:
-Size: Height, length
-Form: Circular, square, triangular
-Function: To ride in, to eat, etc.
-Class: Vehicles, animals, etc.

The child can verbalize the basis for grouping and sorting.

To group by same and different.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 50-52/61-68	B-2, 59-63/72-75

MINI SHOW 1/SEGMENT 3

Description - In a humorous problem solving skit, Buddy and Jim attempt to fit large and small pairs of shoes into large and small shoe boxes.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Given 2 or more pairs of objects, the child can groups the pairs approximately.

Given objects and containers of different sizes, the child can make appropriate correspondence.

Given a situation the child can infer probably consequent events.

Given a set of suggested solutions to a simple problem, the child can select the most relevant, complete or efficient.

Necessary Pre-teaching

-develop the concept of "pair". Teach the word "pair" receptively and expressively.
-develop the concept of "big", "small", "too big", "too small".

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 53-60/77-81/ 91-92	B-2, 64-71/85-87/ 97

MINI SHOW 1/SEGMENT 4

Description - Gordon and a child are sitting on the front steps talking about a wagon. The camera focuses in on a wheel as an introduction to the film "Wheels". The camera searches out wheels in many forms, gears inside a clock, the potter's wheel as well as wheels as they have existed in transportation forms throughout history.

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant, about certain processes which occur in nature, about certain interdependencies which relate various natural phenomena, and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child can identify automobiles, trucks, buses, airplanes and boats, and can tell where and how each is used.

The child can identify wheels in man-made objects.

Necessary Pre-teaching

-The children should be familiar with the concept of "round".

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 88-92/115-120	B-3, 91-97/123-128

SESAME STREET MINI SHOW NO. 2

Length: 14:20 *Number of Segments - 5*

General Description - Includes a numbers segment on "3"; a Buddy and Jim problem solving exercise; 2 segments on animals "Kitten" and "Lion Family"; and a final segment on counting 1-10.

No Captions

MINI SHOW 2/SEGMENT 1

Description - Bert is trying to make the number 3 but gets confused in his directions and finishes by drawing a tree thus creating a play on words. Two jazz animations developing the concept of 3 and the sequence 1-10 are included.

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

Given a printed numeral the child can select the identical printed numeral from a set.

Given a spoken numeral between 1 and 10, the child can select the appropriate numeral from a set of printed numerals.

Given a printed numeral between 1 and 10, the child can provide the verbal label.

Given a set of objects, the child can define a subset containing up to 10.

The child can count to 10.

Given a starting point under ten, the child can count from that number to any given higher number up to ten.

The child will be able to form such basic symbols as numbers.

The child can recognize and identify such basic symbols as numbers by touch alone.

The child can recognize that the last number reached in counting is the total number in the set.

Conservation of Number - The child can match sets of equal number regardless of configuration.

Numeral/Number Correspondence - The child can assign the correct numeral to sets of differing numbers.

The child can perform the appropriate operations needed to balance an equation.

Necessary Pre-teaching

-Explain that puppets are trying to write the numeral three.

Related Activities (Appendix A)	Related Materials (Appendix B)
A-1, 48-58/62-71/ 76-90/98-106	B-1, 40-50/55-73/ 78-87

MINI SHOW 2/SEGMENT 2

Description - Buddy attempts to find a safe way to care for his money by taping it to his forehead. Jim convinces him that the piggy bank is better but then places the key to the bank inside the bank, thus still leaving Buddy with a problem.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Given a situation the child can infer probable consequent events.

Given a set of suggested solutions to a simple problem, the child can select the most relevant, complete, or efficient.

Necessary Pre-teaching

-Concept of saving money.
-Concept of a "safe place".

Related Activities (Appendix A)	Related Materials (Appendix B)
A-2, 77-81/91-92	B-2, 85-87/97

MINI SHOW 2/SEGMENT 3

Description - Gordon, Bob and some children play with guinea pigs and introduce the film "Kitten" in which the camera follows a playful kitten through a series of household mishaps.

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child can classify a group of objects as animals although they vary in size, shape, and appearance.

The child can tell that animals are living things and that they need food and water to grow and live.

The child can associate certain animals with their homes.

To enjoy and to handle animals with care.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 45-67	B-3, 38-63

MINI SHOW 2/SEGMENT 4

Description - The camera follows a zoo lion family including father, mother and cub, through a period of family interaction.

General Objectives

The child can deal with objects and events in terms of certain concepts of order, classification and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

The child can identify himself and other familiar individuals in terms of role-defining characteristics. He is familiar with forms and functions of institutions which he may encounter. He comes to see situations from more than one point of view and begins to see the necessity for certain social rules, particularly those insuring justice and fair play.

Specific Objectives

Size Relationships - Big/Bigger/Biggest; Small/Smaller/Smallest; Short/Tall.

Same/Different - This concept underlies all of the following relational concept categories; size, quantity, position, distance, sequence.

The child can classify a group of objects as animals although they vary in size, shape, and appearance.

The child can tell that animals are living things, and that they need food and water to grow and live.

The child can associate certain animals with their homes.

Given the name of certain roles from the family, neighborhood, city or town, the child can enumerate appropriate responsibilities.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 33-35/69-70 A-3, 45-63 A-4, 1-6	B-2, 37-41/76-80 B-3, 38-59 B-4, 1-8

MINI SHOW 2/SEGMENT 5

Description - James Earl Jones counts to 10 as the numbers appear on the screen.

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

Given a printed numeral the child can select the identical printed numeral from a set.

Given a spoken numeral between 1 and 10, the child can select the appropriate numeral from a set of printed numerals.

Given a printed numeral between 1 and 10,the child can provide the verbal label.

The child can count to 10.

The child can speech read the numbers 1-10.

Interest Level

-Pre-reading, reading readiness, reading.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 48-58/65-75	B-1, 40-50/61-65

SESAME STREET MINI SHOW NO. 3

Length - 17:12 *Number of Segments - 3*

General Description - Mini Show No. 3 contains an alphabet sequence combined with concentration on the letter B; a Buddy and Jim problem solving activity concerned with sequence; and a segment concerned with naming body parts and developing the concept of functions of body parts.

Captioned Verse - "Jump Rope Aches" found in Segment 3.

MINI SHOW 3/SEGMENT 1

Description - James Earl Jones recites the alphabet as each letter appears. Kermit follows with a commercial on "B", but is disturbed by the Cookie Monster changing the letter to "P" and "I".

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operation with these symbols.

Specific Objectives

Given a verbal label for certain letters, the child can select the appropriate letter from a set of printed letters.

Given a printed letter, the child can provide the verbal label.

Given a series of words presented orally, all beginning with the same letter, the child can make up another word or pick another word starting with the same letter.

The child can recite the alphabet.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 12-24/32-36	B-1, 11-20/26-29

MINI SHOW 3/SEGMENT 2

Description - Sequencing two 4 picture stories using still photographs and movies of the sequences. Sequences are; sliding down a sliding board, and opening a present. Workshop teachers considered this an excellant tape.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Given pictures of the earliest and latest of four events in a logically ordered temporal sequence, the child can insert pictures of the intermediate events in their proper order.

The child can order a series of pictures so that they tell a logical story.

To teach sequence.

Necessary Pre-teaching

-Provide the child with many different experiences in sequencing objects and stories that must be put together (ordered) in a particular sequence.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 71-73/82-87	B-2, 81-82/88-93

MINI SHOW 3/SEGMENT 3

Description - There is rhythmical recitation of body parts as a cartoon child jumps rope. This precedes an excellent film presentation of arm and hand movement correlated to that of machine movement. (puncher, lever, drilling, digging). This is an outstanding film.

Captioned Verse *JUMP ROPE ACHES*

Oh, my finger
Oh, my toe
Oh, my thumb
Oh, my nose
Oh, my elbow
Oh, my knee
Oh, my face
Oh, poor me.
(Otherwise I feel fine)

General Objectives

The child can deal with objects and events in terms of certain concepts of order, classification and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

Body Percepts. The child can identify and label such parts of the body as the elbow, knee, lips and tongue.

Positional Relationships - under, over, on top of, below, above, beneath, etc.

Persistence. The child persists in his efforts to solve problems and understand events despite early failures.

Reactions to lack of knowledge. The child exhibits no undue frustration or embarrassment when he must admit to a reasonable lack of knowledge or when he must ask questions.

Impulse control. The child understands that reflection and planning may pay off where premature problem attack will not.

The child can identify such common tools as a hammer and saw and can tell how each is used.

The child can simulate the movements of common machines.

Necessary Pre-teaching

- Review body parts and their functions.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 1-5/36-40/ 93-95 A-3, 93-100	B-2, 1-5/42-46/ 98-100 B-3, 98-105

SESAME STREET MINI SHOW NO. 4

Length - 12:50 *Number of Segments - 4*

General Description - The four segments are directed toward the identification and use of forms; the understanding of some social roles; recognition of the letter I; and introduction to some forms of sea life.

Captions - found in Segment 1 and Seyment 2.

MINI SHOW 4/SEGMENT 1

Description - We see the products of children playing with the basic forms (square, rectangle) and listen to their conversation. Objects they create are a tree, boat, pin wheel, and flower.

Captions - *tree, square, rectangle, boat, pin wheel, flower.*

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

The child will be able to form such basic geometric shapes as a circle, a square, a triangle, or a rectangle.

The child can match a given object or picture to one of a varied set of objects or pictures which is similar in form, size or position.

Given a form, the child can find its counterpart embedded in a picture or drawing.

Labelling. Given a drawing, cut-out or object in the shape of a circle, square, triangle, or rectangle, the child can provide a verbal label for that shape.

Recognition. Given the verbal label, "circle", "square", "triangle", or "rectangle", the child can select the appropriate drawing, cut-out, or object from a set.

The child can structure parts into a meaningful whole:
- -Given a model and a selection of parts the child can select those parts which are essential to the construction of the model.
- -Given a model and an assortment of its parts, the child can arrange these parts to match the model.

Same/Different. This concept underlies all of the following relational concept categories; size, quantity, position, distance, sequence.

Necessary Pre-teaching

-Familiarity with the basic forms.

Related Activities (Appendix A)	Related Materials (Appendix B)
A-1, 117-123 A-2, 6-10/13-19/ 69-70	B-1, 99-103 B-2, 6-7/10-19/ 76-80

MINI SHOW 4/SEGMENT 2

Description - Children are asked to guess the occupation of a person in a picture as the picture is gradually uncovered. Verbal clues are also given. Each completed picture is captioned.

Captions - *fireman, skin diver, astronaut, and Big Bird.*

General Objectives

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

The child can identify himself and other familiar individuals in terms of role-defining characteristics. He is familiar with forms and functions of institutions which he may encounter. He comes to see situations from more than one point of view, begins to see the necessity for certain social rules, particularly those insuring justice and fair play.

Specific Objectives

The child can structure parts into a meaningful whole.

To formulate hypotheses on the basis of partial information.

Given the names of certain roles from the family, neighborhood, city or town, the child can enumerate appropriate responsibilities.

Necessary Pre-teaching

-Familiarity with uniforms of different occupations. E.g., fireman - helmet.

Related Activities (Appendix A)	Related Materials (Appendix B)
A-2, 16-19/96-97 A-4, 1-6	B-2, 15-19/101 B-4, 1-8

MINI SHOW 4/SEGMENT 3

Description - Big Bird has trouble retrieving the animated dot on a giant letter I.

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

Given a printed letter, the child can select the identical letter from a set of printed letters.

Given a printed letter, the child can select its other case version from a set of printed letters.

Given the verbal label for certain letters, the child can select the appropriate letter from a set of printed letters.

Given the printed letter, the child can provide the verbal label.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 4-18	B-1, 4-15

MINI SHOW 4/SEGMENT 4

Description - Gordon watches tropical fish, describes them, and notes different names. This is followed by a puppet song "Octopus Garden".

General Objective

The child's conception of the physical world should include general information about natural phenomena both near and distant, about certain processes which occur in nature, about certain interdependencies which relate various natural phenomena, and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child can differentiate between real and imaginary.

The child should realize that the earth is made of land and water, and that the earth's surface differs in various places.

The child can tell the difference between living and non-living things.

The child can classify a group of objects as animals although they differ in size, shape, or appearance.

The child can associate certain animals with their homes.

Necessary Pre-teaching

-This should be previewed by the teacher as she may wish to expose the children to names and pictures of fish and animal life.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 42-43 A-3, 1-7/30-33/ 45-53/58-63	B-2, 48 B-3, 1-6/28-30/ 38-44/51-59

SESAME STREET MINI SHOW NO. 4a

This Mini Show is the same as No. 4, but the following modifications are included:

General Description - Fingerspelling inserts exist in 3 of the 4 segments. Captions & fingerspelling are the same as No. 4 with the addition of the letter 'i'.

MINI SHOW 4a/SEGMENT 1

These are captioned and fingerspelled.

MINI SHOW 4a/SEGMENT 2

Each completed picture is captioned and fingerspelled.

MINI SHOW 4a/SEGMENT 3

An insert of a fingerspelled 'i' appears

MINI SHOW 4a/SEGMENT 4

SAME

NOTE:

Not all of the participating schools have this Mini Show in their package. However, a copy is available at the Research and Development Complex at the State University College at Buffalo.

SESAME STREET MINI SHOW NO. 5

Length - 17:15 *Number of Segments - 5*

General Description - This show has segments which develops the concept 5 in relation to a birthday party; provides a classification exercise; an environmental film on the sources of common vegetables; an alphabet sequence; and a film of zoo monkeys entitled, "Funny Face".

Captions - exist in Segment 2.

MINI SHOW 5/SEGMENT 1

Description - The Sesame Street neighbors are giving Oscar the grouch a surprise birthday party. Included in the segment are 2 different animations developing the concept of 5 and the sequence 1-10.

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

Given a printed numeral, the child can select the identical printed numeral from a set.

Given a spoken numeral between 1 and 10, the child can select the appropriate numeral from a set of printed numerals.

Given a printed numeral between 1 and 10, the child can provide the verbal label.

Given two unequal sets of objects each containing up to five members, the child can select a set that contains the number requested by the examiner.

Given a set of objects, the child can define a subset containing up to 10.

The child can count to 10.

The child can recognize that the last number reached in counting is the total number in the set.

The child can match sets of equal numbers regardless of configuration.

The child can assign the correct numeral to sets of differing numbers.

The child can perform the appropriate operations needed to balance an equation.

Necessary Pre-teaching

Introduce film by telling children that Oscar has a birthday and can't count to five. His friends help him learn to do this.

Interest Level

Pre-reading and reading readiness.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 48-71/89-90/ 98-106	B-1, 40-65/72-73/ 78-87

MINI SHOW 5/SEGMENT 2

Description - Gordon sets up 3 groups of 4 objects each asking the viewer to find the one object that does not fit the class and explain why.

Captions -*orange, apple, pear, baseball.*

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Given four objects, three of which have an attribute in common, the child can sort out the inappropriate object on the basis of:

-size: height, length;
-form: circular, square, triangular;
-function: to ride in, to eat, etc.;
-class: vehicles, animals, etc.

The child can verbalize the basis for grouping and sorting.

Necessary Pre-teaching

-Exposure to numbers, size and classification of categories such as: clothing, fruits, toys, people.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 50-52/61-62	B-2, 59-63/72-73

MINI SHOW 5/SEGMENT 3

Description - Jennifer and a woman walk through a vegetable garden. They gather corn, beets, carrots, and tomatoes that are growing. They are shown washing the vegetables and preparing them for lunch.

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child can classify a group of objects as plants although they differ in size, shape, and appearance.

The child can tell that plants are living things and that they require sun and water to grow and live.

The child can name some plants that are grown and eaten by man.

Necessary Pre-teaching

Familiarity with vegetables concerned in film.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 25-29/34-44	B-3, 25-27/31-37

MINI SHOW 5/SEGMENT 4

Description - James Earl Jones recites the alphabet as each letter appears on the screen.

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

Given a verbal label for certain letters, the child can select the appropriate letter from a set of printed letters.

Given a printed letter, the child can provide the verbal label.

Given a series of words presented orally, all beginning with the same letter, the child can make up another word or pick another word starting with the same letter.

The child can recite the alphabet.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 12-24/32-36	B-1, 11-20/26-29

MINI SHOW 5/SEGMENT 5

Description - Susan draws a face on the window pane. This is followed by "Funny Face", a film about monkeys.

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child can classify a group of objects as animals although they vary in size, shape, and appearance.

The child can tell that animals are living things and that they need food and water to grow and live.

The child can associate certain animals with their homes.

The child can identify and label such parts of the body as the elbow, knee, lips, and tongue.

Necessary Pre-teaching

Introduction to facial features.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 45-63/78-82	B-3, 38-59/80-85

SESAME STREET MINI SHOW NO. 6

Length - 17:39 *Number of Segments - 4*

General Description - The four segments found in this show deal with development of the concept 4; two classification exercises - one in chart form and one done by Buddy and Jim; and an environmental film showing use of rectangular forms in our surroundings.

No Captions

MINI SHOW 6/SEGMENT 1

Description - The concept 4 is developed through number animations and through practical application - i.e., a chair is not useful unless it has 4 legs; a wagon does not work unless it has 4 wheels.

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

Given a printed numeral, the child can select the identical printed numeral from a set.

Given a spoken numeral between 1 and 10, the child can select the appropriate numeral from a set of printed numerals.

Given a printed numeral between 1 and 10, the child can provide the verbal label.

The child can count to 10.

Given a starting point under ten, the child can count from that number to any given number up to ten.

The child can recognize that the last number reached in counting is the total number in the set.

Conservation of Number. The child can match sets of equal numbers regardless of configuration.

Numeral/Number Correspondence. The child can assign the correct numeral to sets of differing numbers.

The child can perform the appropriate operations needed to balance an equation.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 48-58/65-71/ 76-77/89-90/ 98-106	B-1, 40-50/61-67/ 72-73/78-87

MINI SHOW 6/SEGMENT 2

Description - Susan stands by periaktoi showing four checks, curlicues, and letters G and Z as she sings, "One of These Things . . .". Time is given for the viewer to select the object that is different before confirmation is given.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

To name forms and to identify characteristics of forms.

Given four objects, three of which have an attribute in common, the child can sort out the inappropriate object on the basis of :

-size: height, length;
-form: circular, square, triangular;
-function: to ride in, to eat, etc.;
-class: vehicles, animals, etc.

Necessary Pre-teaching

Basic categorizing using simple forms. Optional: exposure to letter forms.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 11-12/50-52	B-2, 8-9/59-63

MINI SHOW 6/SEGMENT 3

Description - Buddy and Jim buy round and square windows to fit round and square holes but are unsuccessful in their attempts. This is an action version of a formboard and is motivational for the child since he can succeed where Buddy and Jim cannot.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

SESAME STREET MINI SHOW NO. 7

Length - 11:44 *Number of Segments - 4*

General Description - This show contains 4 segments: 1 on the letters A & B, and one on the alphabet; a filmed close-up of a tomato; and a classification problem presented humorously.

No Captions

MINI SHOW 7/SEGMENT 1

Description - Reinforcing Aa and Bb and a review of the alphabet. Cartoons are interrelated with a puppet episode to present the alphabet and the letters A and B.

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms and can perform rudimentary operations with these symbols.

Specific Objectives

Given a set of symbols, either all letters or all numbers, the child knows whether those symbols are used in reading or in counting.

Given a printed letter, the child can select the identical letter from a set of printed letters.

Given a printed letter, the child can select its other case version from a set of printed letters.

Given a verbal label for certain letters, the child can select the appropriate letter from a set of printed letters.

Given a printed letter, the child can provide the verbal label.

Given a series of words presented orally, all beginning with the same letter, the child can make up another word or pick another word starting with the same letter.

Given a spoken letter, the child can select a set of pictures or objects beginning with that letter.

The child can recite the alphabet.

The child will be able to form such basic symbols as letters.

The child will be able to recognize such basic symbols as letters by touch alone.

Necessary Pre-teaching

Introduce vocabulary for reading group only - selected for level of interest and ability of each group.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 1-47	B-1, 1-39

MINI SHOW 7/SEGMENT 2

Description - Gordon and Susan examine their hands with a magnifying glass and then ask the audience to guess what is being photographed in the film sequence that follows. At the conclusion, it is found to be a tomato.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objective

The child can structure parts into a meaningful whole.

Necessary Pre-teaching

Experience with magnifying glass.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 16-19	B-2, 15-19

MINI SHOW 7/SEGMENT 3

Description - James Earl Jones recites the alphabet as each letter appears on the screen.

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

Given a verbal label for certain letters, the child can select the appropriate letter from a set of printed letters.

Given a printed letter, the child can provide the verbal label.

Given a series of words presented orally, all beginning with the same letter, the child can make up another word or pick another word starting with the same letter.

The child can recite the alphabet.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 12-24/32-36	B-1, 11-20/26-29

MINI SHOW 7/SEGMENT 4

Description - Gordon asks Ernie to put 4 spheres into 4 boxes. 1 sphere (a balloon) is too large. Problem solution - air let out of balloon. Ernie tries the same situation on the Cookie Monster. Cookie Monster solution - bites and breaks balloon.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Given four objects, three of which have an attribute in common, the child can sort out the inappropriate object on the basis of:

-size: height, length
-form: circular, square, triangular
-function: to ride in, to eat, etc.
-class: vehicles, animals

The child can suggest multiple solutions to simple problems.

Necessary Pre-teaching

Familiarity with balloons: experiment with a balloon (blow up to different sizes, let air out, break).

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 50-52/89-90	B-2, 59-63/96

SESAME STREET MINI SHOW NO. 8

Length - 18:45 *Number of Segments - 5*

General Description - The segments in Mini Show No. 8 deal with a problem solving activity which includes a number 9 commercial; 2 environmental films on machines; a language arts development of "over", "through", and "around"; and a magnified examination of hands.

No Captions

MINI SHOW 8/SEGMENT 1

Description - Gordon, teaching number 9, builds stairs with 9 boxes and builds walls with 9 boxes. Two number 9 animations are included.

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

Given a printed numeral, the child can select the identical printed numeral from a set.

Given a spoken numeral between 1 and 10, the child can select the appropriate numeral from a set of printed numerals.

Given a printed numeral between 1 and 10, the child can provide the verbal label.

Given two unequal sets of objects each containing up to five members, the child can select a set that contains the number requested by the examiner.

Given a set of objects, the child can define a subset containing up to 10 items.

The child can count to 10.

The child can speech read the numbers 1-10.

The child will be able to form such basic symbols as numbers.

The child can recognize and identify such basic symbols as numbers by touch alone.

The child can recognize that the last number reached in counting is the total number in the set.

Conservation of Number. The child can match sets of equal number regardless of configuration.

Numeral/Number Correspondence. The child can assign the correct numeral to sets of differing numbers.

The child can perform the appropriate operations needed to balance an equation.

Necessary Pre-teaching

Counting concepts and enumerating to nine.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 48-75/78-90/ 98-106	B-1, 40-65/68-73/ 78-87

MINI SHOW 8/SEGMENT 2

Description - Gordon demonstrates the use of a magnet with various iron materials. This precedes a film of a magnetic crane picking up large scraps of materials.

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child can identify automobiles, trucks, buses, airplanes, and boats, and can tell where and how each is used.

The child can identify such common tools as a hammer and saw, and can tell how each is used.

The child can simulate the movements of common machines.

The child can identify the uses and functions of magnets.

The child can identify basic appliances such as refrigerator, record player, and stove, and can tell how each is used.

Necessary Pre-teaching

None necessary although teacher may wish to preview for her specific purposes.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 88-107	B-3, 91-112

MINI SHOW 8/SEGMENT 3

Description - Children, playing a game of "Follow the Leader", exemplify by their actions the meaning of the relational words, "over", "through", and "around".

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objective

Positional Relationships - under, over, on top of, below, above, beneath, etc.

Necessary Pre-teaching

The children should be acquainted with the words "over", "through", and "around", if it is to be used as a language arts lesson.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 36-40	B-2, 42-46

MINI SHOW 8/SEGMENT 4

Description - Susan and Gordon examine their hands under a magnifying glass and then ask the viewer to guess what is magnified in the following film. It is a child's hand.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills, and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objective

The child can structure parts into a meaningful whole.

Necessary Pre-teaching

Experience with magnifying glass.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 16-19	B-2, 15-19

MINI SHOW 8/SEGMENT 5

Description - Gordon, Bob, Susan, and a child watch a construction shovel at work. The film shows the digger picking up and transporting dirt from ground to truck and the means by which the machine is operated by a worker.

General Objective

The child's conception of the physical world should include general information about the natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child can identify automobiles, trucks, buses, airplanes, and boats, and can tell where and how each is used.

The child can identify such common tools as a hammer and saw, and can tell where and how each is used.

The child can simulate the movements of common machines.

The child can identify basic appliances such as refrigerator, record players, and stove, and can tell how each is used.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 88-100/ 105-107	B-3, 91-105/ 111-112

SESAME STREET MINI SHOW NO. 9

Length - 12:12 *Number of Segments - 4*

General Description - Mini Show No. 9 presents a sequencing activity; a magnified examination of a tire tread; a film exploring many means of transportation; and a group of animations of the letter "T".

Captions - exist in Segment 4

MINI SHOW 9/SEGMENT 1

Description - Gordon has 4 photographs of Susan and himself during a lunch period. A child is asked to arrange them in the correct order and to justify his arrangement.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

The child can verbalize the basis for grouping and sorting.

Given pictures of the earliest and latest of four events in a logically ordered temporal sequence, the child can insert pictures of the intermediate events in their proper order.

Necessary Pre-teaching

Experience with sequencing events.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 61-62/71-73	B-2, 72-73/81-82

MINI SHOW 9/SEGMENT 2

Description - Gordon and Susan examine their hands under a magnifying glass and then invite the viewer to determine what the object is in the following film. The film reveals it to be a tire.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objective

The child can structure parts into a meaningful whole.

Necessary Pre-teaching

Experience with magnifying glass.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 16-19	B-2, 15-19

MINI SHOW 9/SEGMENT 3

Description - Gordon and a child sit on steps and try on different caps while pretending to drive different types of vehicles. The film shows a boat, a train, cars, bicycles, and an airplane. Fast paced.

General Objectives

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

The child can identify himself and other familiar individuals in terms of role-defining characteristics. He is familiar with forms and functions of institutions which he may encounter. He comes to see situations from more than one point of view, begins to see the necessity for certain social rules, particularly those insuring justice and fair play.

Specific Objectives

The child can identify automobiles, trucks, buses, airplanes, and boats, and can tell how each is used.

The child can identify such common tools as a hammer and saw, and can tell how each is used.

Given the name of certain roles from the family and neighborhood, city or town, the child can enumerate appropriate responsibilities

Related Activities (Appendix A)	Related Materials (Appendix B)
A-3, 88-96 A-4, 1-6	B-3, 91-102 B-4, 1-8

MINI SHOW 9/SEGMENT 4

Description - 3 cartoon presentations of words beginning with T.

Captions - *train, tractor, toys, TV, turtle.*

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

Given a set of symbols, either all letters or all numbers, the child knows whether these symbols are used in reading or in counting.

Given a printed letter, the child can select the identical letter from a set of printed letters.

Given a printed letter, the child can select its other case version from a set of printed letters.

Given a verbal label for certain letters, the child can select the appropriate letter from a set of printed letters.

Given a printed letter, the child can provide the verbal label.

Given a series of words presented orally, all beginning with the same letter, the child can make up another word or pick another word starting with the same letter.

Necessary Pre-teaching

Familiarity with letters.

Related Activities (Appendix A)	Related Materials (Appendix B)
A-1, 1-24	B-1, 1-20

SESAME STREET MINI SHOW NO. 10

Length - 15:10 *Number of Segments - 4*

General Description - This show has 4 segments dealing with form recognition; identification of environmental sounds; zoo films of lions, giraffes, and rhinos; and a rerun of the segment on environmental sounds, this time using captions.

Captions - exist in Segment 4

MINI SHOW 10/SEGMENT 1

Description - This is a computerized animation of a triangle and a square which emphasizes their physical and functional differences.

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

Given the verbal label "circle", "square", or "triangle", the child can select the appropriate drawing, cut-out or object from a set

The child will be able to form such basic geometric shapes as a circle, a square, a triangle, or a rectangle.

The child can recognize and identify such basic geometric shapes as a circle, a square, a triangle, or a rectangle by touch alone.

Necessary Pre-teaching

Familiarity with a triangle and a square. It is suggested that the teacher view this segment before determining how she would wish to introduce it to her group.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 112-127	B-1, 94-106

MINI SHOW 10/SEGMENT 2

Description - Julio has a pair of "magic" glasses. When he is out walking, these glasses help him find the source of the sounds he hears. This device permits a period of time for viewer response. The sounds are repeated a 2nd time for the benefit of the viewer.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objective

Sound Identification. The child can associate given sounds with familiar objects or animals.

Necessary Pre-teaching

The teacher will need to explain that the children are to listen and identify sounds that they hear on the tape. The "magic" glasses might also have to be explained.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 24-27	B-2, 31-35

MINI SHOW 10/SEGMENT 3

Description - These 3 films appear separately in other mini shows. They are butted together here in order for the teacher to use them in a different context. The first film about lions presents a family of lions trying to settle down to rest, the second about giraffes shows a group of giraffes and their movements, and the third about rhinos shows a pair of rhinos displaying affection for one another.

General Objectives

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

The child can identify himself and other familiar individuals in terms of role-defining characteristics. He is familiar with forms and functions of institutions which he may encounter. He comes to see situations from more than one point of view, begins to see the necessity for certain social rules, particularly those insuring justice and fair play.

Specific Objectives

The child can classify a group of objects as animals although they may vary in size, shape, and appearance.

The child can tell that animals are living things and that they need food and water to grow and live.

The child can associate certain animals with their homes.

Given the name of certain roles from the family, neighborhood, city or town, the child can enumerate appropriate responsibilities.

Necessary Pre-teaching

Familiarity with the animals photographed in the segment.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 45-63 A-4, 1-6	B-3, 38-59 B-4, 1-8

MINI SHOW 10/SEGMENT 4

Description - Julio has a pair of "magic" glasses. When he is out walking, these glasses help him find the source of the sounds he hears. This device permits a period of time for viewer response. Captioning appears when Julio first identifies the source of sound. The captions do not appear on the second presentation. This allows the teacher an opportunity for the children to select the correct word or phrase which cues what she has constructed.

Captions - *train, cat, fire engine, a man sawing, a man whistling.*

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

The child can match words on the basis of common initial sounds.

Sound Identification. The child can associate given sounds with familiar objects or animals.

Necessary Pre-teaching

The teacher will need to explain that the children are to listen and identify sounds they hear on the tape. The "magic" glasses might also have to be explained.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 22-27	B-2, 25-35

SESAME STREET MINI SHOW NO. 11

Length - 15:00 *Number of Segments - 4*

General Description - This show contains segments which develop the concept 6; provides a classification exercise; introduces a Buddy and Jim problem solving activity; and provides an expository film of a commercial bakery.

Captions - exist in Segment 4

MINI SHOW 11/SEGMENT 1

Description - The film opens with Big Bird counting his toes (6 on each foot). This introduces two animated cartoons developing the concept of 6.

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

Given a spoken numeral between 1 and 10, the child can select the appropriate numeral from a set of printed numerals.

Given a printed numeral between 1 and 10, the child can provide the verbal label.

Given a set of objects, the child can define a subset containing up to 10.

The child can count to 10.

Numeral/Number Correspondence. The child can assign the correct numeral to sets of differing numbers.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 52-58/62-71/ 101-104	B-1, 44-50/55-65/ 81-84

MINI SHOW 11/SEGMENT 2

Description - Susan stands beside 2 flannel boards and sings a song, "Here is a new game you can play". She shows 2 flannel boards, one with 3 fruit, the other with a mixture of objects. Susan attempts to have the audience choose which object belongs with the fruit; time is allowed for viewer response. A cartoon of the use of the letter F completes the segment.

General Objectives

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Given a printed letter, the child can select the identical letter from a set of printed letters.

Given at least two objects that define the basis for grouping, the child can select an additional object that goes with them on the basis of:

-size: height, length
-form: circular, square, triangular
-function: to ride in, to eat, etc.
-class: vehicles, animals

Necessary Pre-teaching

Some experience in categorization and exposure to names of fruits.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 4-7 A-2, 45-49	B-1, 4-6 B-2, 52-58

MINI SHOW 11/SEGMENT 3

Description - This is a humorous problem solving situation in which Buddy and Jim attempt to make a peanutbutter and jelly sandwich. They have difficulty getting the contents on the inside of the sandwich.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Positional Relationships. Under, over, on top of, below, above, beneath, etc.

To place an object on the "inside" on printed or verbal command.

Given a situation the child can infer probable consequent events.

Given a set of suggested solutions to a simple problem, the child can select the most relevant, complete, or efficient.

Persistence. The child persists in his efforts to solve problems and understand events despite early failures.

Specific Objectives (con't)

Cooperation. The child recognizes that in certain situations it is beneficial for two or more individuals to work together toward a common goal.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 36-40/44 77-81/91-93 A-4, 7-10	B-2, 42-46/49-51 85-87/97-98 B-4, 9-11

MINI SHOW 11/SEGMENT 4

Description - A film trip to the bakery is introduced by Susan and a child. A little boy imagines that he helps the baker make a pie. The ingredients are captioned as each item is introduced.

Captions - *butter, flour, eggs, mixing, dough, pie pan, cooked apples, oven, frosting.*

General Objectives

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

The child can identify himself and other familiar individuals in terms of role-defining characteristics. He is familiar with forms and functions of institutions which he may encounter. He comes to see situations from more than one point of view and begins to see the necessity for certain social rules, particularly those insuring justice and fair play.

Specific Objectives

Given a situation, the child can infer probable antecedent events.

Given a situation, the child can infer probable consequent events.

Generating Explanations and Solutions. Given a familiar problem, the child can provide adequate explanations and solutions to that problem.

Evaluating Explanations and Solutions. Given several possible explanations or solutions to a problem, the child can evaluate these solutions in reality (trial and error) and in his mind (pretesting). When presented with alternative solutions, he can select the best one.

Necessary Pre-teaching

Familiarity with baking equipment and ingredients.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 74-81/ 98-99 A-4, 1-6	B-2, 83-87 102-103 B-4, 1-8

SESAME STREET MINI SHOW NO. 12

Length - 18:24 *Number of Segments - 5*

General Description - The first segment of this show develops the concept of 2 as it is related to pairs. This is followed by a Buddy and Jim segment on seesawing, a filmed segment of apes playing, and a segment on the form and use of the letter E. The final segment defines and seeks out triangles as they exist in everyday surroundings.

No Captions

MINI SHOW 12/SEGMENT 1

Description - This film presents a number of birds and animals filmed in pairs and was designed for the purpose of developing the concept of a pair.

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

To identify sets of two.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 94-97	B-1, 76-77

MINI SHOW 12/SEGMENT 2

Description - Buddy and Jim have great difficulty discovering the principle by which a see-saw operates. Their pace allows time for viewer response.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Given a situation, the child can infer probable antecedent events.

Given a situation, the child can infer probable consequent events.

Given two or more events which are causally related, the child can place them in their appropriate causal order.

The child can suggest multiple solutions to simple problems.

Given a set of suggested solutions to a simple problem, the child can select the most relevant, complete, or efficient.

Persistence. The child persists in his efforts to solve problems and understands events despite early failures.

Reactions to lack of knowledge. The child exhibits no undue frustration or embarrassment when he must admit to a reasonable lack of knowledge or when he must ask questions.

Impulse control - The child understands that reflection and planning may pay off where premature problem attack will not.

Develop sense of humor in humorous situations. Humor in terms of: inconsistent responses, incorrect responses, irony.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 74-81/88-95 A-4, 11-12	B-2, 83-87/94-100 B-4, 12-13

MINI SHOW 12/SEGMENT 3

Description - This film shows apes engaged in play in their environment either with one another or with swings, water, etc.

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Special Objectives

The child can classify a group of objects as animals although they vary in size, shape and appearance.

The child can tell that animals are living things, and that they need food and water to grow and live.

The child can associate certain animals with their homes.

To enjoy.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 45-63 A-4, 13-19	B-3, 38-59 B-4, 14-18

MINI SHOW 12/SEGMENT 4

Description - This animated sequence of letter Ee with soundtrack of initial and medial $\bar{e}$ is introduced by Gordon describing the shape of E and finding it in existing structures on Sesame Street.

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

Given a printed letter, the child can select the identical letter from a set of printed letters.

Given a printed letter, the child can select its other case version from a set of printed letters.

Given a verbal label for certain letters, the child can select the appropriate letter from a set of printed letters.

The child will be able to form such basic symbols as letters.

The child can recognize and identify such basic forms as letters by touch alone.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 4-15/37-47	B-1, 4-13/30-39

MINI SHOW 12/SEGMENT 5

Description - Bob and Gordon show a variety of triangles and point out that all have 3 sides. They then find a way in which each of these triangles are used in the structure of an everyday object.

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

Given a drawing or a cut-out of a circle, square, or triangle, the child can select a matching drawing, cut-out, or object from a set.

The child will be able to form such basic geometric shapes as a circle, a square, a triangle, or a rectangle.

The child can recognize and identify such basic geometric shapes as a circle, a square, a triangle, or a rectangle by touch alone.

The child can recognize and find such basic geometric forms as circles, squares, triangles, or rectangles in his environment.

Necessary Pre-teaching

Awareness of triangular shapes.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 107-111/ 117-127 A-3, 22-24	B-1, 88-93/99-106 B-3, 21-24

SESAME STREET MINI SHOW NO. 13

Length - 11:50 *Number of Segments - 3*

General Description - The first segment develops the use of E in the initial position using both cartoons and line presentations by Bob. Bob also uses line drawings to describe the growth and hatching of a chick from an egg. The second segment present Buddy and Jim in one of their slow paced problem solving activities. This time Buddy can't enjoy his soup because he has chosen tc use a fork. The final segment is a film of water in many forms - rain, stream, rivers, oceans, etc.

Captions - exist in Segment 1

MINI SHOW 13/SEGMENT 1

Descripton - Several E words are presented via cartoons and clay animations. Bob shows several objects in the drugstore that begin with E; earmuffs, egg, envelopes. The development of a chick from an egg is portrayed in drawing.

Captions - *end, eagle, eel, elephant, eat, envelope, earmuff, ear, everybody, eraser, egg.*

General Objectives

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

Given a series of words presented orally, all beginning with the same letter, the child can make up another word or pick another word starting with the same letter.

Given a spoken letter, the child can select a set of pictures or objects beginning with that letter.

Initial Sounds. The child can match words on the basis of common initial sounds.

To teach sequence.

Reproduction, Growth, and Development. Given pictures of various kinds of young, the child can tell what they will be when they grow up.

Necessary Pre-teaching

Some conception of letters.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 19-31 A-2, 22-23/84-87 A-3, 68-70	B-1, 16-25 B-2, 25-30/90-93 B-3, 64-69

MINI SHOW 13/SEGMENT 2

Description - Buddy chooses to eat his soup with a fork and is unable to understand why he is not enjoying it as much as Jim who has chosen a spoon. Plenty of time for viewer interaction.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

To make associations of two or more things by function.

Given a situation, the child can infer probable consequent events.

The child can suggest multiple solutions to simple problems.

Given a set of suggested solutions to a simple problem, the child can select the most relevant, complete, or efficient.

Necessary Pre-teaching

Be sure the children understand the problem. One device would be to have them transfer a liquid from one container to another using a fork and a spoon.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 45-49/77-81/ 89-92	B-2, 52-58/85-87/ 96-97

MINI SHOW 13/SEGMENT 3

Description - Water in different forms - filmed in an impressionistic sequence (lakes, rivers, ocean, waterfall, snow, ice, rain, etc.)

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child should realize that the earth is made up of land and water and that the earth's surface differs in various places.

Weather and Seasons. The child can describe the weather and activities which are associated with summer and winter.

Necessary Pre-teaching

Recommend previewing by teacher.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 1-7/83-87	B-3, 1-6/86-90

SESAME STREET MINI SHOW NO. 14

Length - 17:00 *Number of Segments - 5*

General Description - In the first segment the children are given an opportunity to find embedded forms in a picture. The second segment deals with environmental sounds. The third identifies the uses of wheels. The fourth provides a classification exercise. The final segment presents visual inconsistencies for identification

Captions - exist in Segment 4

MINI SHOW 14/SEGMENT 1

Description - Jenny and children look at pictures to find Jeffrey embedded in them. Animation of Y - yo yo follows.

General Objectives

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Given a printed letter, the child can provide the verbal label.

Given a form, the child can find its counterpart embedded in a picture or drawing.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 16-18 A-2, 8-10	B-1, 14-15 B-2, 7

MINI SHOW 14/SEGMENT 2

Description - Noises in the environment are associated with objects that make the noise - jack hammer, baby crying, male coughing, female sneezing, car horn, telephone ringing, typewriter. These are presented twice so that the viewer may respond.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objective

Sound Identification. The child can associate given sounds with familiar objects or animals.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 24-27	B-2, 31-35

MINI SHOW 14/SEGMENT 3

Description - Gordon and a child are sitting on the front steps talking about a wagon. The camera focuses in on a wheel as an introduction to the film "Wheels". The camera searches out wheels in many forms, gears inside a clock, the potter's wheel as well as wheels as they have existed in transportation forms throughout history.

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child can identify automobiles, trucks, buses, airplanes, and boats, and can tell where and how each is used.

The child can identify wheels in man-made objects.

Necessary Pre-teaching

The children should be familiar with the concept of "round".

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 88-92/ 115-120	B-3, 91-97/ 123-128

MINI SHOW 14/SEGMENT 4

Description - Susan stands with a chart showing 4 geometric forms and sings "One of These Things". The viewer is to choose which one is correct. Susan verifies the correct form by pointing out that a triangle has 3 corners and 3 sides while rectangles have 4 corners and 4 sides.

Captions - *triangle, rectangle.*

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

To name forms and to identify characteristics of forms.

Given four objects, three of which have an attribute in common, the child can sort out the inappropriate object on the basis of:

- -size: height, length
- -form: circular, square, triangular
- -function: to ride in, to eat, etc.
- -class: vehicles, animals

Necessary Pre-teaching

Gross discrimination of shapes, number concepts 1-5, and exposure to different triangle configurations. Corner and angle are words used in the segment.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 11-12/50-52	B-2, 8-9/59-63

MINI SHOW 14/SEGMENT 5

Description - Sesame Street gang and Jenny look at drawings. Big Bird comes along with 3 original drawings with visual inconsistencies. The group encourages him to take parts of these drawings and re-use them. The resulting drawing is a self-portrait.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Given a form, the child can find its counterpart embedded in a picture or drawing.

The child can structure parts into a meaningful whole.

Necessary Pre-teaching

Concept of parts of a whole and acquaintance with uses of basic environmental objects; a television, a pipe, and a vase.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 8-10/16-19	B-2, 7/15-19

SESAME STREET MINI SHOW NO. 15

Length - 14:00 *Number of Segments - 4*

General Description - The 4 segments in this show are concerned with the form and use of the letter O in the initial position; counting from 10-1 (this appears twice); and the production of milk from the cow to retail store.

Captions - exist in Segments 1, 2, and 4.

MINI SHOW 15/SEGMENT 1

Description - Jenny and a child watch a skywriter make the letter O preceding an O cartoon.

Captions - *open*

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

Given a printed letter, the child can provide the verbal label.

The child will be able to form such basic symbols as letters.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 16-18/37-43	B-1, 14-15/30-35

MINI SHOW 15/SEGMENT 2

Description - Bob introduces a sorting activity using free forms rather than geometric forms. The correct response is identified after viewer response. A counting rhyme on "10 Little Greeblies" follows sequencing from 10-1.

Captions - *vine, skate, heaven, sticks, hive, floor, sea, shoe, bun.*

General Objectives

The child can recognize such basic symbols as letters, numbers and geometric forms, and can perform rudimentary operations with these symbols.

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

The child can count to 10.

To use the phrase "One less than" appropriately to discriminate rhyming words.

Given four objects, three of which have an attribute in common, the child can sort out the inappropriate object on the basis of:
-form: circular, square, triangular

Necessary Pre-teaching

Familiarization with basic sorting of shapes. The Rhyme is included for use with the class.

10 Little Greeblies
Clinging to a vine
1 chased a fly
And then there were 9;
9 Little Greeblies
Riding on a skate
1 tried a trick
And then there were 8;
7 Little Greeblies
Floating on some sticks
1 started fishing
And then there were 6;
6 Little Greeblies
Staring at a hive
1 took some honey
And then there were 5;

5 Little Greeblies
Rolling on the floor
1 bugged a mouse
And then there were 4;
4 Little Greeblies
Swimming out to sea
1 forgot how
And then there were 3;
2 Little Greeblies
Sitting on a bun
1 stayed too long
And then there was 1
1 Little Greeblie
Standing all alone.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 65-71/91-93 A-2, 50-52	B-1, 61-65/74-75 B-2, 59-63

MINI SHOW 15/SEGMENT 3

Description - Susan, offering a child a glass of milk, introduces the film "Hey Cow" which shows milk production, transportation, and packaging for retail outlets.

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objective

The child can distinguish the environment and natural life of the city from those of the country.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 17-21	B-3, 15-20

MINI SHOW 15/SEGMENT 4

Description - The Greeblies counting sequence from Segment 2 is repeated.

Captions - *vine, skate, heaven, sticks, hive, floor, sea, shoe, bun.*

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

The child can count to 10.

To use the phrase "One less than" appropriately to discriminate rhyming words.

Necessary Pre-teaching

Familiarization with basic sorting of shapes. Rhyme is included for use with class. *(See Mini Show 15, Segment 2).*

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 65-71/91-93	B-1, 61-65/74-75

SESAME STREET MINI SHOW NO. 16

Length - 15:26 *Number of Segments - 5*

General Description - The initial segment introduces a perceptual identification activity-Pete Seeger singing and playing the banjo. The objects to be identified are rooster, cat, pig, cow, and a baby crying. The second segment is a close up of a flower growing on an apartment house ledge. The third segment provides a classification exercise using animals as the class. The final 2 segments deal with identification of body parts and their function - Segment 4 being a film on giraffes, and Segment 5 being a child-size puzzle which is assembled twice.

Captions - exist in Segment 3

MINI SHOW 16/SEGMENT 1

Description - Auditory and visual training activity in which Pete Seeger sings a song containing sounds made by a rooster, cat, pig, cow, and baby. As an introduction to each verse, he draws the object, waiting frequently for the viewer to guess what the drawing will be.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

The child can structure parts into a meaningful whole.

Sound Identification. The child can associate given sounds with familiar objects or animals.

Copying rhythms. The child can copy a rhythmic pattern.

To enjoy music.

Necessary Pre-teaching

Familiarity with sounds made by rooster, cat, pig, cow and baby.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 16-19/24-32 A-4, 13-19	B-2, 15-19/31-36 B-4, 14-18

MINI SHOW 16/SEGMENT 2

Description - Big Bird brings Susan a flower. This leads into a close-up examination of a single flower growing on a building ledge high above a city.

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child can structure parts into a meaningful whole.

The child can distinguish the environment and natural life of the city from those of the country.

The child can classify a group of objects as plants although they differ in size, shape, and appearance.

The child can tell that plants are living things, and that they require sun and water to grow and live.

The child can name some plants that are grown and eaten by man.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 16-19 A-3, 17-21/25-29/ 34-44	B-2, 15-19 B-3, 15-20/25-27/ 31-37

MINI SHOW 16/SEGMENT 3

Description - Susan asks the children to complete a class "animals" by selecting from a group of 4 items. The correct response is verified and captioned.

Captions - *animals*

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Given at least two objects that define the basis for grouping, the child can select an additional object that "goes with them" on the basis of:
- -size: height, length
- -form: circular, square, triangular
- -function: to ride in, to eat, etc.
- -class: animals, vehicles, etc.

The child can verbalize the basis for grouping and sorting

Given a set of suggested solutions to a simple problem, the child can select the most relevant, complete, or efficient.

Necessary Pre-teaching

Recognition of the members of the class "animals".

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 45-49/61-62/ 91-92	B-2, 52-58/72-73/ 97

MINI SHOW 16/SEGMENT 4

Description - This is a short filmed sequence of giraffes moving about their yard. The camera focuses on neck length, leg length and demonstrates their gait.

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child can classify a group of objects as animals although they vary in size, shape, and appearance.

The child can tell that animals are living things and that they need food and water to grow and live.

The child can associate certain animals with their homes.

The child can identify and label such parts of the body as the elbow, knee, lips, and tongue.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 45-63/78-82	B-3, 38-59/80-85

MINI SHOW 16/SEGMENT 5

Description - Two children play with a life-size puzzle of a boy. They name each body part as they fit it in and relate it to their own body. Repetition occurs as they remove each piece.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objective

The child can identify and label such parts of the body as the elbow, knee, lips and tongue. (Body Percepts)

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 1-5	B-2, 1-5

SESAME STREET MINI SHOW NO. 17

Length - 11:43 *Number of Segments - 5*

General Description - The five segments in this film deal with a nature walk through the woods; the function of a scrapyard baler; the function of arms and hands related to machines; perspectives using rocks as the topic; and a development of the concept 5.

Captions - exist in Segment 1; Captioned verse found in Segment 3.

MINI SHOW 17/SEGMENT 1

Description - Two children discover many animals and plants that they have never seen before. This ia an exceptionally beautiful film.

Captions - *spider, leaf, fish, frog, turtle. (Close ups of each of these are provided.)*

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child should realize that the earth is made of land and water, and that the earth's surface differs in various places.

The child can identify mountains and rocks although they differ in size and shape.

The child can identify and give salient facts about objects seen in the sky.

The child can distinguish the environment and natural life of the city from those of the country.

The child can classify a group of objects as plants although they differ in size, shape and appearance.

The child can tell that plants are living things, and that they require sun and water to grow and live.

The child can name some plants that are grown and eaten by man.

The child can classify a group of objects as animals although they differ in size, shape, and appearance.

The child can tell that animals are living things and that they need food and water to grow and live.

The child can associate certain animals with their homes.

Specific Objectives (con't)

Given pictures of various kinds of young, the child can tell what they will be when they grow up.

The child can identify such seeds as corn, acorn, bean and knows that after one of these has been planted a new plant will grow.

The child can identify birth, growth, aging, and death as stages in the life process of individual plants and animals.

Necessary Pre-teaching

Teach necessary vocabulary for reading level but film could be used in some contexts with no pre-teaching. Teacher should preview for her own class.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 1-21/25-29/ 34-63/68-77	B-3, 1-20/25-27/ 31-59/64-79

MINI SHOW 17/SEGMENT 2

Description - An oversized magnet picks up metal and machines press scraps into small metal blocks. A man is photographed near the machinery so that size is made relative.

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child can identify automobiles, trucks, buses, airplanes, and boats, and can tell where and how each is used.

The child can identify such common tools as a hammer and saw, and can tell how each is used.

The child can simulate the movements of common machines.

The child can identify the uses and functions of magnets.

The child can identify basic appliances such as refrigerator, record player, and stove, and can tell how each is used.

Necessary Pre-teaching

None necessary although teacher may wish to preview for her specific purposes.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 88-107	B-3, 91-112

MINI SHOW 17/SEGMENT 3

Description - There is rhythmical recitation of body parts as a cartoon child jumps rope. This precedes an excellent film presentation of arm and hand movement correlated to that of machine movement. (puncher, lever, drilling, digging). This is an outstanding film.

Captioned Verse *JUMP ROPE ACHES*

Oh, my finger
Oh, my toe
Oh, my thumb
Oh, my nose
Oh, my elbow
Oh, my knee
Oh, my face
Oh, poor me.
(Otherwise I feel fine)

General Objectives

The child can deal with objects and events in terms of certain concepts of order, classification and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

Body Percepts. The child can identify and label such parts of the body as the elbow, knee, lips and tongue.

Positional Relationships - under, over, on top of, below, above, beneath, etc.

Persistence. The child persists in his efforts to solve problems and understand events despite early failures.

Reactions to lack of knowledge. The child exhibits no undue frustration or embarrassment when he must admit to a reasonable lack of knowledge or when he must ask questions.

Impulse control. The child understands that reflection and planning may pay off where premature problem attack will not.

The child can identify such common tools as a hammer and saw and can tell how each is used.

The child can simulate the movements of common machines.

Related Activities (Appendix A)	Related Materials (Appendix B)
A-2, 1-5/36-40 93-95 A-3, 93-100	B-2, 1-5/42-46/ 98-100 B-3, 98-105

MINI SHOW 17/SEGMENT 4

Description - Filmstrip on rocks and rock formations stressing variations in size depending on positions and the distance between camera and children. Included is a microscopic examination of a small rock.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

To match or relate a particular view of an object with the entire object.

Size Relationships. Big, bigger, biggest; short, tall; skinny, little, etc.

Distance Relationships. Near, far away, close to, next to, etc.

The child should realize that the earth is made of land and water and that the earth's surface differs in various places.

The child can identify mountains and rocks although they differ in size and shape.

The child can identify and give salient facts about objects seen in the sky.

Related Activities (Appendix A)	Related Materials (Appendix B)
A-2, 20-21/33-35 41 A-3, 1-16	B-2, 20-24/37-41/ 47 B-3, 1-14

MINI SHOW 17/SEGMENT 5

Description - Two animations developing the concept of 5 are presented.

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

Specific Objectives

Given a spoken numeral between 1 and 10, the child can select the appropriate numeral from a set of printed numerals.

Given a printed numeral between 1 and 10, the child can provide the verbal label.

Given two unequal sets of objects each containing up to five members, the child can select a set that contains the number requested by the examiner.

Given a set of objects, the child can define a subset containing up to 10.

The child can count to 10.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 52-71	B-1, 44-65

SESAME STREET MINI SHOW NO. 18

Length - 15:01 *Number of Segments - 5*

General Description - The 5 segments in this show include identification of common objects from a bird's eye view, a Buddy and Jim situation involving buttoning a coat, a view of a honey bear eating, an alphabet plus development of the letter "B" segment, and a classification exercise.

Captions - exist in Segments 1, 3, and 5.

MINI SHOW 18/SEGMENT 1

Description - Visual perceptual activity in which the child is asked to look at an aerial or top view of an object and tell what the object is. Identification of the object is made and captioned.

Captions - *homes, tree, car, bus, traffic light, lamp, chair.*

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

The child can structure parts into a meaningful whole.

To match or to relate a particular view of an object with the entire object.

Necessary Pre-teaching

Experience with part-whole relationships. Practice in looking at objects from the top, from the side, etc., may be needed by some children.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 16-21	B-2, 15-24

MINI SHOW 18/SEGMENT 2

Description - Buddy doesn't know how to button his coat and Jim's instructions do not provide him with the correct solution. The viewer has time to respond.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Given a set of suggested solutions to a simple problem, the child can select the most relevant, complete,or efficient.

The child persists in his efforts to solve problems and understand events despite early failures.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 91-93	B-2, 97-98

MINI SHOW 18/SEGMENT 3

Description - Bob and a child play with a live honey bear and feed it a banana.

Captions - *Honey Bear*

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena, and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child can classify a group of objects as animals although they vary in size, shape, and appearance.

The child can tell that animals are living things and that they need food and water to grow and live.

The child can associate certain animals with their homes.

Necessary Pre-teaching

Introduce the animal, kinkajou, as honey bear.

Related Activities (Appendix A)	Related Materials (Appendix B)
A-3, 45-63	B-3, 38-59

MINI SHOW 18/SEGMENT 4

Description - James Earl Jones recites the alphabet as each letter appears. Kermit follows with a commercial on "B", but is disturbed by the Cookie Monster changing the letter to "P" and "I".

General Objective

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operation with these symbols.

Specific Objectives

Given a verbal label for certain letters, the child can select the appropriate letter from a set of printed letters.

Given a printed letter, the child can provide the verbal label.

Given a series of words presented orally, all beginning with the same letter, the child can make up another word or pick another word starting with the same letter.

The child can recite the alphabet.

Related Activities (Appendix A)	Related Materials (Appendix B)
A-1, 12-24/32-36	B-1, 11-20/26-29

MINI SHOW 18/SEGMENT 5

Description - This is a classification exercise concluding with 2 different classes, each captioned.

Captions - *clothing, animals.*

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Given at least two objects that define the basis for grouping, the child can select an additional object that "goes with them" on the basis of:

-size: height, length
-form: circular, square, triangular
-function: to ride in, to eat, etc.
-class: animals, vehicles, etc.

The child can verbalize the basis for grouping and sorting.

Necessary Pre-teaching

A basic concept that there are many kinds of animals.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 45-49/61-62	B-2, 52-58/72-73

SESAME STREET MINI SHOW NO. 18a

This Mini Show is the same at No. 18, but the following modifications are included:

General Description - Fingerspelling duplicates captions except traffic light and Honey Bear.

MINI SHOW 18a/SEGMENT 1

All words except traffic light are fingerspelled.

Necessary Pre-teaching

Introduce or reinforce fingerspelled vocabulary.

MINI SHOW 18a/SEGMENT 2

SAME

MINI SHOW 18a/SEGMENT 3

SAME

MINI SHOW 18a/SEGMENT 4

Letters are fingerspelled as changes occur.

MINI SHOW 18a/SEGMENT 5

Captioned and fingerspelled, clothing, etc.

NOTE:

Not all of the participating schools have this Mini Show included in their package. However, a copy is available at the Research and Development Complex at the State University College at Buffalo.

SESAME STREET MINI SHOW NO. 19

Length - 13:10 *Number of Segments - 5*

General Description - The first segment is a Buddy and Jim problem solving activity concerned with hanging a picture. This is followed by a film about birds; a classification exercise between 2 and W; Susan and children playing with puppies; and a film about a mischievous kitten.

Captions - exist in Segment 2

MINI SHOW 19/SEGMENT 1

Description - Comedy problem solving situation determining how to hang a picture on the wall.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Given a situation, the child can infer probable consequent events.

The child can suggest multiple solutions to simple problems.

Given a set of suggested solutions to a simple problem, the child can select the most relevant, complete, or efficient.

The child can recognize that in certain situations it is beneficial for two or more individuals to work together toward a common goal.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 77-81/89-92 A-4, 7-10	B-2, 85-87/96-97 B-4, 9-11

MINI SHOW 19/SEGMENT 2

Description - A studio shot of a great horned owl (captioned) precedes a film of many different zoo birds.

Captions - *great horned owl*

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child can classify a group of objects as animals although they vary in size, shape, and appearance.

The child can tell that animals are living things, and that they need food and water to grow and live.

The child can associate certain animals with their homes.

Necessary Pre-teaching

Introduce by talking about different kinds of birds (owl, flamingo, pigeon, chicken, ostridge, parrots, etc.). Discuss body parts - wings, beak, talons.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 45-63	B-3, 38-59

MINI SHOW 19/SEGMENT 3

Description - A discrimination exercise is given between number 2 and letter "w". A cartoon "W-Worm" follows.

General Objectives

The child can recognize such basic symbols as letters, numbers, and geometric forms, and can perform rudimentary operations with these symbols.

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Given a set of symbols, either all letters or all numbers, the child knows whether those symbols are used in reading or in counting.

Given a printed letter, the child can select the identical letter from a set of printed letters.

Given a printed letter, the child can provide the verbal label.

Given a series of words presented orally, all beginning with the same letter, the child can make up another word or pick another word starting with the same letter.

Given a spoken letter, the child can select a set of pictures or objects beginning with that letter.

Given four objects, three of which have an attribute in common, the child can sort out the inappropriate object on the basis of:
-size: height, length,
-form: circular, square, triangular
-function: to ride in, to eat, etc.
-class: vehicles, animals

The child can verbalize the basis for grouping and sorting.

Necessary Pre-teaching

Vocabulary: Worm, water, walrus.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-1, 1-7/16-31 A-2, 50-52/61-62	B-1, 1-6/14-25 B-2, 59-63/72-73

MINI SHOW 19/SEGMENT 4

Description - Susan and children pet and feed a puppy.

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child can classify a group of objects as animals although they vary in size, shape, and appearance.

The child can tell that animals are living things, and that they need food and water to grow and live.

The child can associate certain animals with their homes.

To enjoy and to handle animals with care.

Related Activities (Appendix A)	Related Materials (Appendix B)
A-3, 45-67	B-3, 38-63

MINI SHOW 19/SEGMENT 5

Description - The camera follows a playful kitten through a series of household mishaps.

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child can classify a group of objects as animals although they vary in size, shape, and appearance.

The child can tell that animals are living things and that they need food and water to grow and live.

The child can associate certain animals with their homes.

To enjoy and to handle animals with care.

Related Activities (Appendix A)	Related Materials (Appendix B)
A-3, 45-67	B-3, 38-63

SESAME STREET MINI SHOW NO. 20

Length - 12:53 *Number of Segments - 5*

General Description - The 5 segments in this show include a film on monkeys at play; a Buddy and Jim problem solving activity on buttoning a coat; a classification exercise; a film on a new born reindeer; and a nature film of a walk through the woods.

Captions - exist in Segment 5

MINI SHOW 20/SEGMENT 1

Description - Susan draws a face on the window pane. This is followed by "Funny Face", a film about monkeys.

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child can classify a group of objects as animals although they vary in size, shape, and appearance.

The child can tell that animals are living things and that they need food and water to grow and live.

The child can associate certain animals with their homes.

The child can identify and label such parts of the body as the elbow, knee, lips, and tongue.

Necessary Pre-teaching

Introduction to facial features.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 45-63/78-82	B-3, 38-59/80-85

MINI SHOW 20/SEGMENT 2

Description - Buddy doesn't know how to button his coat and Jim's instructions do not provide him with the correct solution. The viewer has time to respond.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Given a set of suggested solutions to a simple problem, the child can select the most relevant, complete or efficient.

The child persists in his efforts to solve problems and understand events despite early failures.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 91-93	B-2, 97-98

MINI SHOW 20/SEGMENT 3

Description - This provides classification of objects by function: 3 objects to eat and 1 mitten. Correct response is shown.

General Objective

The child can deal with objects and events in terms of certain concepts of order, classification, and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.

Specific Objectives

Given four objects, three of which have an attribute in common, the child can sort out the inappropriate object on the basis of:

-size: height, length
-form: circular, square, triangular
-function: to ride in, to eat, etc.
-class: vehicles, animals

To group by same and different.

Necessary Pre-teaching

Some experience with classification of food and clothing.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-2, 50-52/63-68	B-2, 59-63/74-75

MINI SHOW 20/SEGMENT 4

Description - Susan talks with a young child about a picture of a baby reindeer. A film of the early life of a baby reindeer with its mother is shown.

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

Reproduction, Growth and Development - Given pictures of various kinds of young, the child can tell what they will be when they are grown up.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 68-70	B-3, 64-69

MINI SHOW 20/SEGMENT 5

Description - Two children discover many animals and plants that they have never seen before. This ia an exceptionally beautiful film.

Captions - *spider, leaf, fish, frog, turtle. (Close ups of each of these are provided.)*

General Objective

The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.

Specific Objectives

The child should realize that the earth is made of land and water, and that the earth's surface differs in various places.

The child can identify mountains and rocks although they differ in size and shape.

The child can identify and give salient facts about objects seen in the sky.

The child can distinguish the environment and natural life of the city from those of the country.

The child can classify a group of objects as plants although they differ in size, shape and appearance.

The child can tell that plants are living things, and that they require sun and water to grow and live.

The child can name some plants that are grown and eaten by man.

The child can classify a group of objects as animals although they differ in size, shape, and appearance.

The child can tell that animals are living things, and that they need food and water to grow and live.

The child can associate certain animals with their homes.

Given pictures of various kinds of young, the child can tell what they will be when they grow up.

The child can identify such seeds as corn, acorn, bean and knows that after one of these has been planted a new plant will grow.

The child can identify birth, growth, aging, and death as stages in the life process of individual plants and animals.

Necessary Pre-teaching

Teach necessary vocabulary for reading level but film could be used in some contexts with no pre-teaching. Teacher should preview for her own class.

Related Activities *(Appendix A)*	Related Materials *(Appendix B)*
A-3, 1-21/25-29/ 34-63/68-77	B-3, 1-20/25-27/ 31-59/64-79.

APPENDIX A - RELATED ACTIVITIES

A-1 Related Activities - Symbolic Representation
A-2 Related Activities - Cognitive Processes
A-3 Related Activities - The Physical Environment
A-4 Related Activities - The Social Environment

APPENDIX A-1

RELATED ACTIVITIES - SYMBOLIC REPRESENTATION

1. Classroom Activity. "Balloon Fun".
   Level - Ages 3-5 Type - Group
   Materials - several balloons with a separate letter of the alphabet and a separate number from 1 to 10 printed on each balloon with a magic marker.
   Description - Place all the blown-up balloons in a circle formed by the class. Close your eyes and say either "number" or "letter". Have a child pick one of the correct balloons. Have the children keep all the balloons they have correctly identified.

2. Classroom Activity. "Letter and Number Boxes".
   Level - Ages 3-5 Type - Group
   Materials - 2 empty pint milk cartons with the top removed and covered with the letter A on the front of one cartoon, and the number 1 on the front of the other carton; several 2" tagboard squares with A's and 1's on each one.
   Description - Mix all the 2" square tagboard letters and numbers together. Have the children sort the letter A and the number 1 into their appropriate cartons.
   Adaptation - This activity can be adapted by adding more letters and numbers and by classifying them by their appropriate letter or number groups as a whole, or by their separate labels.

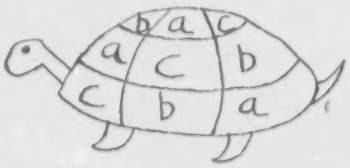
3. Game. "Ring Toss".
   Level - Ages 4-5 Type - Small Group
   Materials - ten round-top clothespins; 3 rubber jar rings; shallow box.
   Description - Cut 10 holes in the box and put a clothespin in each. Paste 5 numbers on five separate pins and 5 letters on 5 separate pins. Have each child take 3 throws with the rings. If he gets a "ringer" he must state whether the pin he ringed is a number or a letter. The child with the most correct answers is the winner.

4. Classroom Activity. "Alphabet Match".
   Level - Ages 4-6 Type - Individual
   Materials - a piece of tagboard ruled into 1" squares lettered from A to Z with a blank square below each letter. A set of one inch letter cards with one card for each letter of the alphabet; paste.
   Description - Have the child match the letter card with the same letter on the board and paste it underneath that letter.

5. Classroom Activity. "Sorting Letters".
   Level - Ages 5-6 Type - Individual
   Materials - 2" x 3" index cards with at least four of each letter of the alphabet printed on each card.
   Description - Present child with a portion of the alphabet or the entire alphabet, depending on the child's readiness for this activity. Have child sort each letter into separate piles.

6. Game. "Letter Bingo".
   Level - Ages 5 and up Type - Group
   Materials - Dittoed grid 5 squares x 5 squares; paper circles; crayons; alphabet letters; box.
   Description - Each child fills in any 25 letters he wishes on the grid in any order he likes. Teacher picks letters one at a time out of a box and shows it to the class. If child has that letter he covers it. First one to have 5 in a row covered wins and tells what letters he covered.

7. Art. "Color by Letter".
Level - Ages 7-9 Type - Individual
Materials - dittoed paper with a simple animal, etc., outlined on it, and divided into lettered sections; crayons.
Description - Give each child a dittoed form and direct him to color all sections with a certain letter, a certain color. Draw a color and letter key on the board. Example:



Key
a = red
b = yellow
c = green

8. Classroom Activity. "Umbrellas and Raindrops".
Level - Ages 4-5 Type - Group
Materials - large sheet of tagboard with an outline of an umbrella drawn on it.
Description - The picture of the umbrella is sectioned with an upper case letter of the alphabet in any order, printed in each section. Pre-cut "raindrops", each printed with a lower case letter, are given to the child. The child is directed to match and paste the lower case lettered raindrops on the upper case lettered sections of the umbrella.

9. Game. "Letter Concentration".
Level - Ages 4-6 Type - Small Group
Materials - 26 teacher-made alphabet cards, each of upper and lower case letters separately printed on each card.
Description - Spread cards face down in several rows. Children take turns turning over 2 cards at a time in an effort to match upper to lower case letter cards. If the pair does not match, both cards are turned over again, if the pair matches, the child keeps the pair he matches. The child with the most pairs at the end of the matching wins.

10. Game. "Letter-Match Card Game".
Level - Ages 4-7 Type - Small Group
Materials - 26 3" x 5" teacher-made alphabet cards, each of the upper and lower case letters separately printed on each card.
Description - Deal out all the cards to each player. Each player in turn picks a card from the player on his right. If the card matches (lower case and upper case) the player lays it in front of him. The player with the most matches wins.

11. Art. "Letter Collage".
Level - Ages 6-8 Type - Individual/Group
Materials - large poster board; magazines; scissors; paste; varnish; brush.
Description - Have children cut out the upper and lower case version of a certain letter or letters from magazines, and paste on the poster board. Varnish the entire board when completely covered with letters.

12. Classroom Activity. "Eat the Alphabet".
Level - Ages 3-5 Type Group
Materials - alphabet cereal and milk or alphabet soup; dishes; spoons.
Description - Give each child a bowl of soup or cereal. The teacher will

12. (Cont'd) now ask aloud or sign a certain letter. When the child finds the appropriate letter, he may eat it.

13. Classroom Activity. "Ducks in the Pond".
Level - Ages 4-6 Type - Group/Individual
Materials - large picture of a pond or lake; several dittoed sheets with 7 or 8 large ducks each having a letter written on them; scissors; paste.
Description - Give each child one dittoed sheet and ask aloud, or sign for a certain letter. The children will then cut out the appropriate ducks that have that letter and paste the ducks on the pond.

14. Game. "Alphabingo".
Level - Ages 5-7 Type - Group
Materials - Teacher-made bingo cards divided into 25, 1" square (5 rows across, 5 rows down) with each square randomly lettered; markers; 25 letters in a separate bag.
Description - The teacher will select letters one at a time from the bag and say or sign what it is. If the child has that letter, he will cover it with a marker. The first child to have 5 letters across or 5 letters down covered is the winner.

15. Art. "Letter Mural".
Level - Ages 5-8 Type - Group
Materials - many pre-cut different letters; large roll of paper; paste.
Description - Spread letters on table. Call out a certain letter, one at a time and encourage each child to paste that on the peper in a variety of ways so that a creative form emerges.

16. Game. "Fish for Letters".
Level - Ages 4-6 Type - Small Group
Materials - bucket; cards with individually printed letters of the alphabet and a paper clip attached; yardstick with string and magnet attached.
Description - Have the children fish for a letter. If he can correctly identify the letter, he pulls it out of the bucket. The child with the most letters is the winner.

17. Classroom Activity. "Letter Toss".
Level - Ages 5-8 Type - Group
Materials - 26 flash cards, each showing one letter of the alphabet.
Description - Have the children sit on the floor close to you. Show a flash card and toss it to the first child to say the correct name of the letter. See who can collect the most cards.

18. Game. "Letter Roulette".
Level - Ages 6-10 Type - Small Group
Materials - Large cardboard circle divided into 10 sections with one letter printed in each section; 1 card per player of each letter being used; colored markers; dice.
Description - Place letter cards in corresponding sections of circle. Each player in turn will roll the dice and move his marker the appropriate number of sections. The player must correctly identify the letter he landed on. If he is correct, he takes a card from the corresponding pile (only one card from each pile per student). The children continue playing in the circle until the pre-agreed time limit is over. The child with the most cards at the end of the game wins.

19. Classroom Activity. "Color Coded Word Dictionary".
Level - Ages 6-9 Type - Group
Materials- chart paper; crayons.
Description - Make an alphabetical, basic sight, vocabulary dictionary out of large sheets of chart paper in the form of a booklet with the children. As a new word is introduced, print it in your booklet under the correct alphabetical listing. Words may be color coded, i.e., initial letter in red and the rest of the word in black, etc., for easier identification and correspondence. Allow the children to use the word dictionary at any time.

20. Game. "Word Hunt".
Level - Ages 7-9 Type - Group
Materials - teacher-made flash cards of familiar vocabulary words.
Description - The teacher puts flash cards containing words beginning with a certain letter (and some that don't) at different spots around the room. The teacher says a word and asks all the children in turn to look for a word that begins with the same letter as the word she mentioned.

21. Game. "A Tisket, A Tasket Word Game".
Level - Ages 7-9 Type - Group
Materials - teacher-made flash cards of familiar vocabulary words; pins.
Description - Each child wears one card with a familiar word written on it (each word beginning with a different consonant). One child walks around a circle and taps someone and says the word pinned on him. The tapped person must turn and say a different word beginning with the same letter he sees on the tapper's card. If he can do so, he chases the tapper and tries to catch him. If the child catches the tapper, it will be his turn to go around the room and tap someone.

22. Game. "Spin a Word".
Level - Ages 7-9 Type - Small Group
Materials - a teacher-made game spinner in the shape of a circle with familiar words for each letter of the alphabet written around it.
Description - The child spins the spinner and must orally say the word the spinner stopped at and provide a word beginning with the same letter as that word did. Keep score to determine a winner.

23. Game. "Word Race".
Level - Ages 7 and up Type - Group
Materials - paper; pencil.
Description - The object of this game is to write in two minutes as many words as possible that begin with a certain letter in a word that the teacher mentions. The child with the most words spelled correctly wins.
Variation - Write as many words that have a certain letter in the medial or final position.

24. Game. "AlphaQuiz".
Level - Ages 8-12 Type - Group
Description - Each child is called on in order to give a word for each successive letter in the alphabet. For example, child #1 says an "A" word; child #2 says a "B" word and so on through the entire alphabet. The teacher records the words on the chalkboard. If a word is repeated, or if a child can't think of one, he is out. This game may have several winners.

25. Classroom Activity. "Alphabet Rope".
Level - Ages 5-8 and up Type - Group
Materials - long clothesline; clip-type clothespins.
Description - Hang the clothesline low across the room. Glue one letter of the alphabet to each pin. Have the children clip on real objects or pictures of things that begin with each letter. The objects and pictures can be changed every month for vocabulary building. It is also an interesting 3D decoration for the classroom.

26. Fieldtrip. "Letter Walk".
Level - Ages 5-10 Type - Group
Materials - paper; pencils.
Description - Go on a walk around the school and/or neighborhood with each child being responsible for finding objects beginning with a certain letter and making a list of these objects. For young children the teacher can make the list as the children call out the names of the objects.

27. Art. "Picture Vocabulary Collage".
Level - Ages 5-10 Type - Group
Materials - magazines; scissors; glue; varnish; brush; heavy tagboard.
Description - Have the children look through the magazines and find pictures of objects that begin with a certain letter. Have them cut and paste these pictures on the tagboard in a random fashion to form a collage and varnish.

28. Game. "Letter Go Fish - A Self-Checking Game".
Level - Ages 7-9 Type - Individual/Small Group
Materials - a small box; a set of cards folded in half; pictures cut from magazines; paperclips; small magnet; string; stick.
Description - A "fishing rod" is made from string, stick and magnet. Pictures of objects familiar to the children are pasted onto small cards which have been folded in half so that the picture is visible. Inside the card, the teacher writes the letter the picture begins with and secures the card with a paper clip. All cards are placed in a box. The child "catches" a card with the fishing rod and says the letter the picture on the card begins with. He opens the card to check if he is correct. For 2 or more children, cards to which the correct response has been given can be kept as a form of score keeping. Incorrect responses should be put back into the box to be chosen later.

29. Game. "Picture Word Hunt".
Level - Ages 7-10 Type - Group
Materials - set of teacher-made picture cards of class' sight vocabulary; paper; pencils.
Description - Give each child a pencil and paper. The teacher then says, "I'm thinking of the letter ___". The children will then very quietly walk around the room and either draw a quick picture or write the name of the object on his paper. When the pre-determined time is up the child will either read his list or show the class his objects. Keep a tally to determine a winner.

30. Art. "My Picture Dictionary".
Level - Ages 6-9 Type - Individual
Materials - construction paper; scissors; paste; magazines; crayons.
Description - Fold several sheets of construction paper to form a booklet titled, "My Picture Dictionary". On the first page, have each child find pictures or draw their own of words that begin with the letter "A" from the magazines and paste them into the book. Do this for each letter of the alphabet on each page. Older children can label their pictures.

31. Game. "How Many Words".
Level - Ages 8-10 Type - Group
Description - One child leaves the room. The other children decide on a letter that has been studied. When the child returns the others tell him the selected letter. Within a set period of time that child will say as many objects in the room that begin with the selected letter as he can think of. The number of words he says is his score. Each child should have a turn.

32. Classroom Activity. "Alphabet Recordings".
Level - Ages 4-6 Type - Individual/Group
Materials - tape recorder.
Description - Record each of the children in the class reciting the alphabet. With each recording eliminate a letter or change the sequence of a few letters. The students must identify the error or errors.

33. Classroom Activity. "Human Alphabetical Order".
Level - Ages 5-7 Type - Group
Materials - large letters printed on cardboard.
Description - Give a letter to each child. Have the children stand up and arrange themselves in alphabetical order. Repeat by changing letters, leaving a few letters out, setting a time limit, etc..

34. Game. "Alphabet Antics".
Level - Ages 5-7 Type - Group
Description - The teacher writes the alphabet on the board. Have the children close their eyes while one child erases one letter. The others must guess the missing letter.

35. Game. "What's Next?".
Level - Ages 6-8 Type - Group
Materials - flash cards with the letters A to Z on them; blackboard; chalk.
Description - The teacher holds up a flash card with a letter on it and the children must write on the board the letter that follows it. This can be done in team competition or individual competition.
Special Adaptation - Have the children write the letter that comes before the one shown.

36. Race. "Alphabet Relay".
Level - Ages 6-8 Type - Group
Description - Divide the chalkboard into two sections and the class into two teams. Have them stand behind a line drawn about 10 feet from the board. On the word "go", the first child from each team runs to the board and writes the letter A, runs back and gives the next child the chalk. He runs to the board and writes the letter B and runs back, and so forth. The first team that has correctly written the alphabet is the winner.

37. Classroom Activity. "Whipped Cream Letters".
Level- Ages 4-5 Type - Small Group
Materials - whipped cream; formica table.
Description - On a clean formica table, spread some whipped cream like finger paint. Have the children practice forming letters with the whipped cream. Other groups of children can have their turn using frosting or pudding or any other variety of spreadable-type good-licking materials.

38. Art. "Dot-to-Dot Letters".
Level - Ages 4-5 Type - Group
Materials - teacher-made dittoes of dotted outlines of 10 letters; crayons.
Description - Have the children trace the dots with a crayon and form a letter. Later on parts of the letter could be left off to be completed by students.

39. Art. "Plaster Letters".
Level - Ages 4-5 Type - Individual
Materials - teacher-made cardboard letter molds; plaster of paris; paint; brushes.
Description - Give each child a letter mold and help him fill it in with plaster of paris. When dry, remove from molds and have children paint.

40. Classroom Activity. "Rope Letters".
Level - Ages 4-6 Type - Individual/Group
Materials - rope.
Description - Explore letter shapes with a rope on the floor. Try and reproduce the letters with eyes open; eyes closed.

41. Art. "Play Dough Letters".
Level - Ages 4-6 Type - Individual
Materials - Play Dough; paint; brush.
Description - Have children roll "play dough" into snake-like forms and reproduce letter shapes. Letters can be painted after dough hardens.

42. Art. "Wiry Letters".
Level - Ages 4-6 Type - Individual
Materials - pipe cleaners; string.
Description - Have children reproduce letter shapes with pipe cleaners. Finished letters can be hung with string around the room.

43. Art. "Stick Letters".
Level - Ages 4-6 Type - Individual
Materials - dark piece of construction paper; glue; popsicle sticks.
Description - Give each child a sheet of construction paper, some glue, and several popsicle sticks. Have the children reproduce familiar letters with the popsicle sticks. Have them glue the finished letters on the paper and display.

Note - The preceding seven activities mention only a few of the many materials the teacher can use with the class for this objective. Other easily accessible and non-expensive materials that a child can use to formulate letters are; foil, straws, paint, pegboards, sponge, styrofoam, or sand and glue molds, etc.. A picture of the letter or a 3-dimensional letter given to the child prior to these activities, will prove most helpful for him in formulating the letters.

44. Classroom Activity. "Blind Man's Bluff".
Level - Ages 5 and up Type - Individual/Group
Materials - 3-dimensional letters; blindfold; chalk and chalkboard.
Description - Place 3 of the 3-dimensional letters in a bag and print the same 3 letters on the chalkboard. Blindfold a child and hand him a letter from the bag. He may feel and manipulate the letter any way he wishes before putting it back in the bag. Remove the blindfold and have the child circle the letter he felt on the chalkboard. Add more letters later on to make the task more difficult.

45. Classroom Activity. "Right-Hand, Left-Hand Letter Match".
Level - Ages 5 and up Type - Group/Individual
Materials - alphabet letters cut from sandpaper; a set of 3-dimensional letters.
Description - Give a child one sandpaper letter and have him feel it and trace it with his left hand. With his right hand, have him try and find, by touch only, the identical letter as the sandpaper letter. Place only a few 3-D letters in the bag at first.

46. Classroom Activity. "Letters Feel and Find".
Level - Ages 6 and up Type - Individual/Group
Materials - mystery box with a hole on top; different sized 3-dimensional letters; chalkboard and chalk.
Description - Place a number of 3-dimensional letters in the box. Have a child print a letter on the chalkboard while another child tries to feel and find that letter in the box. Continue until all children have a turn.

47. Classroom Activity. "Touch 'n Sort".
Level - Ages 6 and up Type - Group/Individual
Materials - 3-dimensional letters in various sizes; blindfold.
Description - To start, mix 2 letters only of various sizes on the table. Blindfold a child and have him sort the letters in their 2 respective piles by touch alone. As the child becomes more proficient, add more letters.

48. Game. "Number Line".
Level - Ages 4-5 Type - Individual/Group
Materials - large number line, 1-10, on the floor; box of numerals.
Description - Choose a child to pick a numeral from the box. He must then hop, etc. to the corresponding number on number line.

49. Game. "Number Watch".
Level - Ages 4-5 Type - Group
Materials - a set of teacher-made numerals, 1 for each child, and a complete set for the teacher.
Description - Give each child a numeral and have him place it in front of him. The teacher will randomly hold up a number and say, "I would like this number to skip around the room", etc. Give each child a turn.

50. Game. "Musical Number Chairs".
Level - Ages 4-7 Type - Group
Materials - 1 different number for each child and the corresponding number taped to a chair; marching record; record player.
Description - Give each child a number and have him march around the chairs in a circle to the marching record. Have the children march around a few times so they will have plenty of time to locate the chair which corresponds to the number they have. When the music stops, the children must quickly race to the appropriate chair and sit down. The last person to sit down is eliminated, and their chair is taken out. Continue until their is one winner.

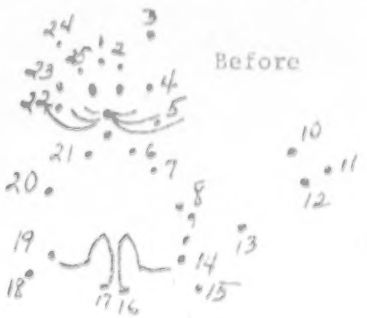
51. Game. "Match the Same".
Level - Ages 5 and up Type - Small Group
Materials - deck of regular playing cards.
Description - Place the cards face down in even rows. The child turns over a card and must try and match that card to the identical card by turning it over. When he does, he can keep the pair. The child with the most cards wins the game.
Note - Use only a few cards at first. Gradually increase that number as the child's proficiency increases, until the whole deck of cards is being used.

52. Classroom Activity. "Stand Up For Numbers!".
Level - Ages 3-5 Type - Group
Materials - ten cardboard squares each with a numeral on them.
Description - Give each child one card. Teacher will say, sign (or both) a numeral. The child who is holding that numeral must stand and show it to the others.

53. Classroom Activity. "Number Fingers/Finger Numbers".
Level - Ages 4-6 Type - Individual/Group
Materials - tempera paints; brush.
Description - Paint the numbers 1 through 10 - one number on each fingertip of the child's hand. The teacher will then say or sign (or both), "Show me number 2", etc., and the children will hold up the appropriate finger.

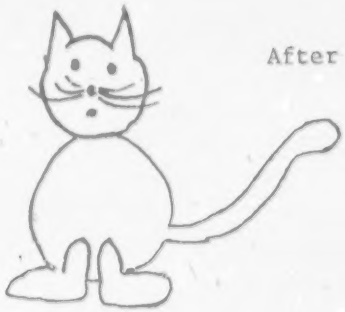
54. Game. "Numberbingo".
Level - Ages 4-8 Type - Group
Materials - teacher or student-made bingo cards with numbers randomly printed on each square, on each card; markers; a complete set of numbers in a bag for the teacher.
Description - Give each child a number bingo card, and a supply of markers. The teacher will randomly say or sign, (or both) numbers as each student places a marker over the corresponding number on his card. The first child to have 5 numbers in a row, across or down, is the winner.

55. Art. "Follow the Numbers Mystery Picture".
Level - Ages 5-7 Type - Individual
Materials - crayons; teacher-made dittoed worksheets such as the following:



Before

55. (Cont'd)
Description - Say or sign (or both) the children to follow directions such as the following example. Example - "Draw a straight line from 5 to 9, 9 to 8, 8 to 10, 10 to 3, 3 to 5. What is it?"



After

Note - Other simple teacher- or student-made drawings can be made in the same way, and can even be colored or cut-out later.

56. Game. "Fishing for Numerals".
Level - Ages 3-5 Type - Small Group
Materials - stick, string and magnet for fishing pole; separate cards cut in the shape of a fish with the numerals 1-10 written on them; and a paper clips attached to the card, placed in a box.
Description - Have the child place his fishing pole in the box and catch a fish. He must correctly identify the number in order to keep his catch. If he misses the fish must go back in the box. The child with the most fish wins.

57. Classroom Activity. "The Number Drum".
Level - Ages 4-5 Type - Individual/Group
Materials - a drum; a set of printed numerals.
Description - The teacher will hold up one number in front of the class. One child is chosen to correctly identify the number aloud and then bangs the drum the appropriate number of times.

58. Game. "Go Fish".
Level - Ages 4-8 Type - Small Group
Materials - a deck of playing cards, minus the jacks, queens and kings.
Description - Deal each student seven cards and spread the remaining cards face down in a pile. The first child will ask one child at a time if he has a particular card that he himself is holding. If he does, the child will take the card and lay it down in front of his for a 'match', and take another turn. If the child asked doesn't have the card, the first child must 'go fish' as the next child takes a turn. The child with the most 'matches' at the end of the game when all the cards in the pile are exhausted, is the winner.

59. Art. "Cut-out Picture Sets".
Level - Ages 4-6 Type - Individual
Materials - teacher-made dittoes with drawings of 2 unequal sets of objects; For example, 5 apples and 4 flowers, etc.; scissors; construction paper; paste; crayons.
Description - Have the class cut out, paste, and color a picture using a specified number of the same objects. More sets with greater numbers of objects can be added later on. Display completed pictures.

60. Classroom Activity. "Select the Set".
Level - Ages 5-7 Type - Individual/Group
Materials - a cardboard box; a variety of up to 5 objects each in a set such as 5 paper clips, 3 rubber bands, 4 buttons, 2 nails, etc.
Description - Place only 2 unequal sets of objects in the box at one time. Ask the child to give you the set with a certain number of objects in it. Add more sets of objects in the box as the child becomes more proficient.

61. Classroom Activity. "Children Sets".
Level - Ages 5-8 Type - Group
Description - Divide the class into groups of different sizes. Have one child point to the group that correctly identifies the number of children you requested.

62. Game. "In the Bag".
Level - Ages 4 and up Type - Individual
Materials - a large paper bag; 10 buttons or chips; chart paper; crayons.
Description - Have each child stand behind a set line and try to throw the buttons into the bag. After 10 throws he counts how many are in the bag and how many are not. Score is kept on the chart paper in the following manner. List the childrens' names in a row in one column. Label a second column "In the Bag" and a third column "Missed". Record each child's score and declare a winner or winners - whoever has the highest "In the Bag" count.

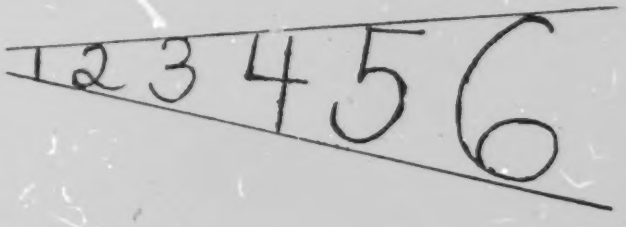
63. Art. "Sets Booklets".
Level - Ages 5-8 Type - Individual
Materials - construction paper; crayons; paste.
Description - Give each child some construction paper and have him make a 1-10 numbered booklet. Each page should be labeled or numbered, or both, a different number. Have the children draw, cut and paste different sets of objects for each page. For example, the number two could contain 2 houses, 2 flowers, 2 circles, etc. Display the booklets around the room when completed.

64. Classroom Activity. "Inventory".
Level - Ages 6 and up Type - Group
Materials - chart paper divided into two columns, 1 column labeled "what" at the top, the other labeled "how many"; crayon.
Description - With the class, count up the objects in the classroom, such as 10 desks, 2 plants, 4 windows, 2 doors, etc. Record on chart paper.

65. Classroom Activity. "Number Stepping".
Level - Ages 3-5 Type - Individual/Group
Materials - cardboard squares with a number from 1-10 on each square.
Description - Place cardboard squares on floor from 1 through 10. Have each child walk on the squares from 1 to 10 as they count aloud.

66. Classroom Activity. "Rings and Fingers".
Level - Ages 3-5 Type - Individual/Group
Materials - 10 small curtain rings with the numerals 1-10 attached to them; cardboard cutout of a child's hands glued to a block of wood so it will stand up.
Description - Have the child take the rings one at a time and place them on the fingers of the cutout, starting at the left and working in numerical order.

67. Classroom Activity. "Crescendo Numbers".
Level - Ages 3-5 Type - Individual/Group
Materials - construction paper; scissors; masking tape.
Description - Cut numerals from construction paper, making a small number 1 and have each number get consecutively bigger. Make 2 guidelines on the floor with masking tape. Have the guidelines start together and gradually become farther apart. Let each child put the numbers in order of smallest to largest (1-10) using these guidelines. Example -



68. Classroom Activity. "Knot Numbers".
Level - Ages 3-5 Type - Individual/Group
Materials - rope; blindfold.
Description - Tie knots in a rope. Have the children feel the knots blindfolded and count how many there are. Have children take turns tying knots and testing other children.

69. Classroom Activity. "Clap Ten".
Level - Ages 3-6 Type - Group
Description - Have the children sit in a circle. One child will start by saying one. The next child on the right will say two, and around the circle in this clockwise fashion up to 10. Number 10 is not said; instead the child claps. The next child starts with one again, and so on. If a mistake is made, start again with one.

70. Classroom Activity. "Drum Numbers".
Level - Ages 4-6 Type - Individual/Group
Materials - drum; drumstick.
Description - The teacher will hit the drum a certain number of times. The children must watch, listen, and count, the number of times to themselves. They must tell the teacher how many times she hit the drum by saying and signing the numeral. If correct, the child may hit the drum that number of times.

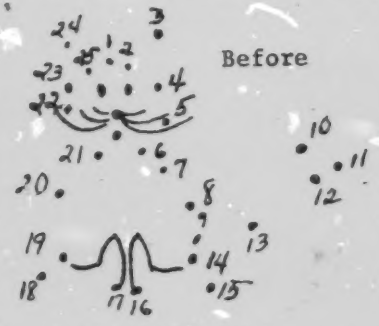
71. Classroom Activity. "Number Bounce".
Level - Ages 4-6 Type - Group/Individual
Materials - large ball.
Description - The child must watch and count to himself the number of times the teacher bounces the ball. The child with the correct answer may bounce the ball that number of times.

72. Classroom Activity. "Stand Up for Numbers!".
Level - Ages 3-5 Type - Group
Materials - ten cardboard squares each with a numeral on them.
Description - Give each child one card. Teacher will say, sign (or both), a numeral. The child who is holding that numeral must stand and show it to the others.

73. Classroom Activity. "Number Fingers/Finger Numbers".
Level - Ages 4-6 Type - Individual/Group
Materials - tempera paints; brush.
Description - Paint the numbers 1 through 10 - one number on each fingertip of the child's hand. The teacher will then say or sign (or both), "Show me number 2", etc., and the child will hold up the appropriate finger.

74. Game. "Numberbingo".
Level - Ages 4-8 Type - Group
Materials - teacher or student-made bingo cards with numbers randomly printed in each square, on each card; markers; a complete set of numbers in a bag for the teacher.
Description - Give each child a numberbingo card, and a supply of markers. The teacher will randomly say, or sign (or both), numbers as each student places a marker over the corresponding number on his card. The first child to have 5 numbers in a row, across or down, is the winner.

75. Art. "Follow the Numbers Mystery Picture".
Level - Ages 5-7 Type - Individual
Materials - crayons; teacher-made dittoed worksheets such as the following:



Description - Say or sign (or both) the children to follow directions such as the following example to complete the mystery picture. Example - "Draw a straight line from 5 to 9, 9 to 8, 8 to 10, 10 to 3, 3 to 5. What is it?"

Note - As you will note, these activities were adapted from the objective "Given a spoken numeral between 1 and 10, the child can select the appropriate numeral from a set of printed numerals". Many other of the previous activities are also adaptable for this objective.

76. Classroom Activity. "Numerical Order".
Level - Ages 5-8 Type - Individual/Group
Materials - flashcards with a number from 1-10 on each card.
Description - Take out flashcards in sequence only from number 1 and up, i.e., 1-3, 1-4, 1-5, etc. Choose a child and give him the rest of the shuffled cards and have him line them up in numeric order to 10 on the chalk tray.

77. Game. "Fan-Tan".
Level - Ages 7-12 Type - Small Group
Materials - deck of playing cards, minus jacks, queens and kings.
Description - Deal all the cards to 3-6 players. First player must have a five card (any suit) in order to start game. If he does not have a 5, the first player on his right going clockwise to have a 5 may start. The next player on his right may place another 5 down (start a new row if it's a different suit) or he may place a 4 or a 6 from the suit that was led. Cards may be placed only by suits in proper numerical sequence from Ace to 10. The first player to play all of his cards is the winner.

78. Classroom Activity. "Whipped Cream Numbers".
Level - Ages 4-5 Type - Small Group
Materials - whipped cream; formica table.
Description - On a clean formica table, spread some whipped cream like fingerpaint. Have the children practice forming numbers with the whipped cream. Other groups of children can have their turn using frosting or pudding or any other variety of spreadable-type good licking materials.

79. Art. "Dot-to-Dot Numbers".
Level - Ages 4-5 Type - Group
Materials - teacher-made dittoes of dotted outlines of numbers; crayons.
Description - Have the children trace the dots with a crayon and form a number. Later on parts of the number could be left off to be completed by students.

80. Art. "Plaster Numbers".
Level - Ages 4-5 Type - Individual
Materials - teacher-made cardboard number molds; plasterof paris; paint; brushes.
Description - Give each child a number mold and help him fill it in with plaster of paris. When dry, remove from molds and have the children paint.

81. Classroom Activity. "Rope Numbers".
Level - Ages 4-6 Type - Individual/Group
Materials - rope.
Description - Explore number shapes with a rop on the floor. Try and reproduce the numbers with eyes open; eyes closed.

82. Art. "Play Dough Numbers".
Level - Ages 4-6 Type - Individual
Materials - Play Dough; paint; brush.
Description - Have children roll "play dough" into snake-like forms and reproduce number shapes. Numbers can be painted after dough hardens.

83. Art. "Wiry Numbers".
Level - Ages 4-6 Type - Individual
Materials - pipe cleaners; string.
Description - Have children reproduce number shapes with pipe cleaners. Finished numbers can be hung with string around the room.

84. Art. "Stick Numbers".
Level - Ages 4-6 Type - Individual
Materials - dark piece of construction paper; glue; popsicle sticks.
Description - Give each child a sheet of construction paper, some glue, and several popsicle sticks. Have the children reproduce familiar numbers with the popsicle sticks. Have them glue the finished numbers on the paper and display.

Note - The preceding seven activities mention only a few of the many materials the teacher can use with the class for this objective. Other easily accessible and non-expensive materials that a child can use to formulate numbers are; foil, straws, paint, pegboards, sponge, styrofoam, or sand and glue molds, etc. A picture of the number or a 3-dimensional number given to the child prior to these activities will prove most helpful for him in formulating the numbers.

85. Classroom Activity. "Blind Man's Bluff".
Level - Ages 5 and up Type - Individual/Group
Materials - 3 dimensional numbers, blindfold, chalk and chalkboard.
Description - Place 3 of the 3 dimensional numbers in a bag and print the same 3 numbers on the chalkboard. Blindfold a child and hand him a number from the bag. He may feel and manipulate the number any way he wishes before putting it back in the bag. Remove the blindfold and have the child circle the number he felt on the chalkboard. Add more numbers, later on to make the task more difficult.

86. Classroom Activity. "Right-Hand, Left-Hand Number Match".
Level - Ages 5 and up Type - Group/Individual
Materials - numbers cut from sandpaper; a set of 3 dimensional numbers.
Description - Give a child one sandpaper number and have him feel it and trace it with his left hand. With his right hand, have him try and find, by touch only, the identical number as the sandpaper number. Place only a few 3-D numbers in the bag at first.

87. Classroom Activity. "Numbers Feel and Find".
Level - Ages 6 and up Type - Individual/Group
Materials -mystery box with a hole on top; different sized 3-dimensional numbers; chalkboard and chalk.
Description - Place a number of 3 dimensional numbers in the box. Have a child print a number on the chalkboard while another child tries to feel and find that number in the box. Continue until all children have a turn.

88. Classroom Activity. "Touch 'n Sort".
Level - Ages 6 and up Type - Group/Individual
Materials - 3 dimensional numbers in various sizes; blindfold.
Description - To start, mix 2 numbers only of various sizes on the table. Blindfold a child and have him sort the numbers in their 2 respective piles by touch alone. As the child becomes more proficient, add more numbers.

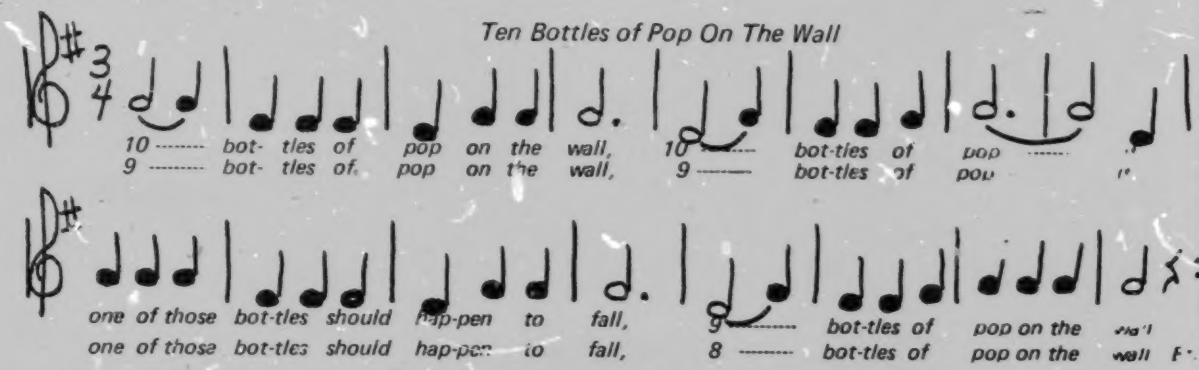
89. Art. "Nine-Mine".
Level - Ages 6-8 Type - Individual
Materials - nine shapes each of different colored contact paper; construction paper.
Description - Have each child pick nine shapes of one color. When this is done correctly, he may place and peel them onto construction paper and

89. (Cont'd)
make a picture or design. Other amounts of objects can also be used. Display completed designs.

90. Classroom Activity. "Genetic Sets".
Level - Ages 6-10 Type - Group
Description - Have the children in class take turns counting various genetic characteristics of the children in the class as you record what and how many they are counting. For example; children with brown eyes, blue eyes, blond hair, etc..

91. Game. "Musical Chairs"
Level - Ages 4 and up Type - Group
Materials - 1 chair less than the number of children participating; marching record; record player.
Description - Line up the chairs in a row. Have the children march to the record. When the record stops, the children must race to a chair. The child without a chair is out. Remove one chair each time a child leaves. Play until there is one winner.

92. Song. "10 Bottles of Pop on the Wall".
Level - Ages 4 and up Type - Group
Materials - 10 empty bottles; the following song:


Ten Bottles of Pop On The Wall
10 ------ bot- tles of pop on the wall, 10 ------ bot-tles of pop ------
9 ------ bot- tles of pop on the wall, 9 ------ bot-tles of pop
one of those bot-tles should hap-pen to fall, 9 ------ bot-tles of pop on the
one of those bot-tles should hap-pen to fall, 8 ------ bot-tles of pop on the wall

Description - Teach the class the above song. Once the song is learned, illustrate it with the class' help by lining up 10 empty bottles and removing them one at a time on cue.

93. Game. "Five - Hot and Cold".
Level - Ages 5-8 Type - Group
Materials - a set of 5 of the same objects; blindfold.
Description - Display the set to the class. Blindfold one child and have another child choose 1 or more objects from the set and hide it in a visible place. Remove the blindfold from the child and have him first look over the set and tell you how many objects are missing and how many are left. If he correctly does so, he may hunt for the missing object(s) with clues (hot or cold) from the class. Hot means close; cold means far away; warm means very close, etc.

94. Game. "Shoe Race".
Level - Ages 4 and up Type - Group
Description - Have children take off one shoe or sneaker and put it in a pile in the middle of the room. The teacher will mix them up. On the count of three the children will race to the pile and find his or her shoe. The first person to do so, race back to his place and sit down, is the winner.

95. Game. "Old Maid".
Level - Ages 5-10 Type - Small Group
Materials - deck of cards with 3 Queens removed.
Description - Deal all cards to children. First child picks card from child on left. If he makes a set of 2 of the same kind, he puts it down in front of him. Play until only the Queen is left.

96. Classroom Activity. "Match Unseen".
Level - Ages 6-10 Type - Individual/Small Group
Materials - several bags filled with a number of 2 identical objects each: blindfold.
Description - Divide the class into small groups. Give each group a bag of objects and a blindfold. Have each group blindfold a child and dump the contents of the bag in front of him. The blindfolded child must sort the objects into sets by touch alone. Each group can check each other.

97. Game. "Two Set Go".
Level - Ages 6-10 Type - Small Group
Materials - a supply and variety of 2 of the same type of objects around the classroom; paper; pencils.
Description - Divide the class into a number of teams. Have each team find and record as many different sets of two objects in the room in a pre-determined amount of time. The team with the most objects when time is called is the winner.

98. Classroom Activity. "Making Sets".
Level - Ages 5-8 Type - Individual/Small Group
Materials - small blocks; teacher-made flashcards (each one with a few different set configurations of the numbers 1-10).
Description - Have the children take turns, turning up the flashcards that have been placed face down in a pile and duplicating that set with blocks. Children can check each others' work.

99. Game. "Sets Scramble".
Level - Ages 6-10 Type - Individual/Small Group
Materials - teacher-made sets of the numbers 2-10 in at least 3 different configurations drawn on cards. For example -

Description - Mix all the sets of number configurations together. Have the child put all number configurations for each number together. Two or more children, each with their own set of number configurations can compete together for speed and accuracy.

100. Classroom Activity. "Set Association".
Level - Ages 6-10 Type - Group
Materials - 2 teacher-made sets of the numbers 2-10 in two different configurations drawn on large cards. Example -

100. (Cont'd)
Example -

Description - Spread one set of number configurations on the chalkboard tray. Mix and place the other set face down in a pile. Have one child at a time choose a card from the pile and place it over its corresponding number set on the chalkboard.

101. Game. "Postman".
Level - Ages 5-7 Type - Group
Materials - flannel board; felt numbers 1-10; a supply of teacher-made felt packages.
Description - Space the felt numbers on the flannelboard and explain to the children that they will be postmen for an apartment building. The numbers on the flannelboard tells how many packages they may deliver. Call a student to put the appropriate number of packages that they may deliver to the apartment the teacher points to.
Note - This activity can be reversed, i.e., place the packages in sets and have the child put the correct felt number by the corresponding set.

102. Game. "Set Matching Hop".
Level - Ages 5-8 Type - Group
Materials - large teacher-made laminated cards showing the numerals 1-10 on each card; smaller cards containing set configurations for each number such as 2 squares for the number 2, 3 squares for the number 3.
Description - Spread the large, laminated number cards in a row on the floor. Shuffle and place the smaller number configuration cards in a pile. Have one child at a time pick a small numeral configuration card from the pile and hop to the corresponding laminated card on the floor. Children can check each others' accuracy.

103. Classroom Activity. "Punch-a-Number".
Level - Ages 5-8 Type - Individual/Group
Materials - cupcake tin with each section filled with a different amount of not more than ten objects and completely covered with tinfoil; flashcards with a number from 1 to 10 printed on each card; pencil.
Description - Spread the flashcards on the chalk tray for the class to see. Have one child at a time punch a hole with the pencil in one section of the cupcake tin and count the objects. Have him point to the corresponding number flashcard on the chalk tray.

104. Art. "Transparency Set".
Level - Ages 6 and up Type - Group/Individual
Materials - clear transparency in frame; marking pens or crayons; overhead projector.
Description - Allow each child to design his own transparency showing a specific number of objects for any number he chooses. For example - one child may draw 3 triangles and 3 flowers for the number 6. Show each transparency on an overhead projector and have the class correctly identify the appropriate number for each transparency.

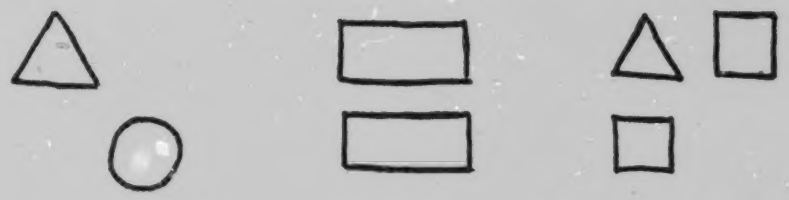
105. Classroom Activity. "Equation Line".
Level - Ages 6-8 Type - Group
Description - Draw a chalk line on the floor. Have one child stand on one side of the chalk line and another child stand on the other side. Write on the board 1 = 1 and have the children say it with you and count the students using this equation. Next, have 2 children on one side and 2 children on the other side. Write on the chalkboard 2 = 2, 1 + 1 = 2, 2 = 1 + 1, 1 + 1 = 1 + 1, as the children repeat each equation and count the students using this equation. Continue with more children and more equations as you see fit.
Special Adaptation - The chalk line can be replaced by a large equal sign, and the children can hold numbers instead of writing on the chalkboard.

106. Classroom Activity. "Picture Equations".
Level - Ages 6-10 Type - Group
Materials - 2 identical pictures or drawings each, 1 picture remaining intact, the other cut in such a way as to show a part missing (e.g., a table with 3 legs); masking tape.
Description - Tape one part of the cut up picture to the chalkboard followed by a plus sign and a black line. Tape the intact picture next to the black line but separated by an equal sign. Underneath the picture write a corresponding equation. For example -

Table with 3 legs + _____ = table with 4 legs
3 + _____ = 4

Have a child tape the missing leg by the picture equation and have the class tell you what number should go in the black line in the number equation. Continue with other pictures and number equations.

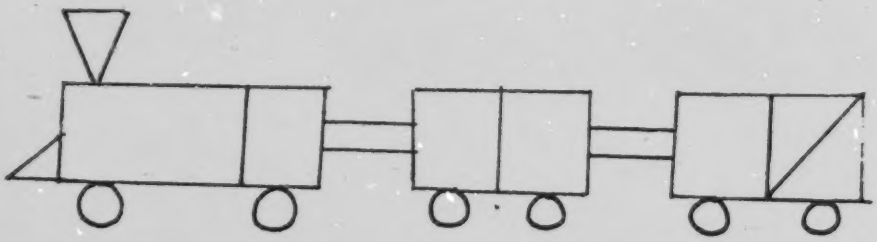
107. Classroom Activity. "Match-o-Gram Shapes".
Level - Ages 4-5 Type - Individual
Materials - several 3 dimensional or cut out geometric shapes; several different teacher-made match-o-grams using the same shapes. Example -



Description - Give each child a match-o-gram and several 3-D cut out shapes. Have him match and place the shapes over their corresponding shape on the match-o-gram. The shapes could also be pasted on the match-o-gram and displayed around the room.

108. Classroom Activity. "Surprise Box Shapes".
Level - Ages 4-5 Type - Group
Materials - a colorfully decorated 'surprise box' with a hole on top and filled with different sized circles, squares, triangles, etc.; a large teacher-made wall chart covered with the same sized shapes as in the box - colored in black; paste.
Description - Have each child reach into the surprise box and pull out a cut-out shape. Have him match and paste it to the same size and shape as the black cut out on the wall chart.

109. Art. "Cut-out Shape Creations".
Level - Ages 5 and up Type - Individual
Materials - construction paper; paste; scissors.
Description - Have the children cut out circles, triangles, rectangles, and squares out of construction paper. Have them paste these cut out shapes on another sheet of construction paper creating designs or pictures.
Example -



110. Game. "Shapes Match".
Level - Ages 5-7 Type - Small Group
Materials - 3" x 5" teacher-made cards with 2 cards each of geometric shapes such as circles, squares, triangles, rectangles, diamonds, hearts, etc.
Description - Pass out all cards to the group. Each child in turn will pick a card at random from the player on the right matching identical shapes. When each "match" is made, it is laid down in front of the child. The first child to match all the cards in his hand is the winner.

111. Art. "Design Making with Shapes".
Level - Ages 5-8 Type - Individual
Materials - 3 dimensional triangle, rectangle, square, and circle; paper; crayons; pencils.
Description - Have child place a geometric shape on paper and trace around it with a pencil. Select another shape and place it in a new area on the paper, or overlap the previously drawn shape. When design is completed have the child color the shapes with crayons.

112. Classroom Activity. "Circle the Circle".
Level - Ages 4-6 Type - Group/Individual
Materials - teacher-made dittoes with many different circular objects randomly drawn among many other shaped objects; crayons.
Description - Have each child circle or 'x' circular objects on the paper with their crayon. Repeat this activity for triangular objects and square objects, etc..

113. Race. "Shapes Scramble".
Level - Ages 4-8 Type - Group
Materials - teacher-made 8" x 11" paper with a circle, square, triangle, or rectangle drawn on it for each child.
Description - Give each child a piece of paper with a shape on it, face down. Tell the class that on the count of 3 you would like everyone to turn over his paper and have only the triangles stand up and hop. Switch papers between activities and provide different tasks for each group, or 2 different tasks for 2 groups at the same time.

114. Classroom Activity. "Shapes Quiz".
Level - Ages 5-7 Type - Individual
Materials - teacher-made dittoes of different sized circles, squares, triangles, and rectangles, etc.; crayons.
Description - On the teacher's verbal instructions, have the children color a certain shape, a certain color with their crayons. For example, "Color all circles red, all triangles blue, all rectangles yellow, and all squares green."

115. Race. "Shapes Relay".
Level - Ages 5-8 Type - Group
Materials - set per team of a large circle, square, triangle, and rectangle cut-outs.
Description - Divide the class into teams and have them line up in rows behind a chalk line drawn approximately 10 feet away from the chalkboard. Place a set of shapes for each team in a pile on the chalkboard tray. On the count of three the teacher will call out a shape. The first member of each team must race to the pile and pick the correct shape, run back and give it to the next member. The teacher will quickly, before the child runs back, call out another shape. The second child will replace the shape he has in his hand with the correct shape from the pile, race back and hand it to the next member, and so on. The first team to finish is the winner.

116. Game. "Fizzling Figures".
Level - Ages 6-8 Type - Group
Materials - an assortment of different colored rectangles, squares, circles, and triangles.
Description - Give each child a different colored shape and have the children sit with their shape in sight. The teacher will then call out a certain shape and color and the child with that particular shape must quickly stand. The game is played for speed - if the child misses, he is out.

117. Classroom Activity. "Whipped Cream Shapes".
Level - Ages 4-5 Type - Small Group
Materials - whipped cream; formica table.
Description - On a clean formica table, spread some whipped cream like finger paint. Have the children practice forming shapes with the whipped cream. Other groups of children can have their turn using frosting or pudding or any other variety of spreadable-type good licking materials.

118. Art. "Dot-to-Dot Shapes".
Level - Ages 4-5 Type - Group
Materials - teacher-made dittoes of dotted outlines of shapes; crayons.
Description - Have children trace the dots with a crayon and form a shape. Later on parts of the shape could be left off to be completed by students.

119. Art. "Plaster Shapes".
Level - Ages 4-5 Type - Individual
Materials - teacher-made cardboard shape molds; plaster of paris; paint; brushes.
Description - Give each child a shape mold and help him fill it in with plaster of paris. When dry, remove from molds and have children paint.

120. Classroom Activity. "Rope Shapes".
Level - Ages 4-6 Type - Individual/Group
Materials - rope
Description - Explore shapes with a rope on the floor. Try to reproduce the shapes with eyes open; eyes closed.

121. Art. "Play Dough Shapes".
Level - Ages 4-6 Type - Individual
Materials - play dough; paint; brush.
Description - Have children roll "play dough" into snake-like forms and reproduce shapes. Shapes can be painted after dough hardens.

122. Art. "Wiry Shapes".
Level - Ages 4-6 Type - Individual
Materials - pipe cleaners; string.
Description - Have children reproduce shapes with pipe cleaners. Finished shapes can be hung with string around the room.

123. Art. "Stick Shapes".
Level - Ages 4-6 Type - Individual
Materials - dark piece of construction paper; glue; popsicle sticks.
Description - Give each child a sheet of construction paper, some glue, and several popsicle sticks. Have the children reproduce familiar shapes with the popsicle sticks. Have them glue the finished shapes on the paper and display.

Note - The preceding seven activities mention only a few of the many materials the teacher can use with the class for this objective. Other easily accessible and non-expensive materials that a child can use to formulate shapes are: foil, straws, paint, pegboards, sponge, styrofoam or sand and glue molds, etc.. A picture of the shape or a 3 dimensional shape given to the child prior to these activities will prove most helpful for him in formulating the shapes.

124. Classroom Activity. "Blind Man's Bluff".
Level - Ages 5 and up Type - Individual/Group
Materials - 3 dimensional shapes; blindfold; chalkboard; chalk.
Description - Place 3 of the 3 dimensional shapes in a bag and draw the same 3 shapes on the chalkboard. Blindfold a child and hand him a shape from the bag. He may feel and manipulate the shape any way he wishes before putting it back in the bag. Remove the blindfold and have the child circle the shape he felt on the chalkboard. Add more shapes later on to make the task more difficult.

125. Classroom Activity. "Right-Hand, Left-Hand Shape Match".
Level - Ages 5 and up Type - Group/Individual
Materials - shapes cut from sandpaper; a set of 3 dimensional shapes.
Description - Give a child one sandpaper shape and have him feel it and trace it with his left hand. With his right hand, have him try and find, by touch only, the identical shape as the sandpaper shape. Place only a few 3-D shapes in the bag at first.

126. Classroom Activity. "Shapes Feel and Find".
Level - Ages 6 and up Type - Individual/Group
Materials - mystery box with a hole on top; different sized 3 dimensional shapes; chalkboard and chalk.
Description - Place a number of 3 dimensional shapes in the box. Have a child draw a shape on the chalkboard while another child tries to feel and find that shape in the box. Continue until all children have a turn.

127. Classroom Activity. "Touch 'n Sort".
Level - Ages 6 and up Type - Group/Individual
Materials - 3 dimensional shapes in various sizes; blindfold.
Description - To start, mix 2 shapes only of various sizes on the table. Blindfold a child and have him sort the shapes in their 2 respective piles by touch alone. As the child becomes more proficient, add more shapes.

APPENDIX A-2

RELATED ACTIVITIES - COGNITIVE PROCESSES

1. Art. "Hand Prints".
   Level - Ages 3-5 Type - Individual
   Materials - finger paints; white paper; magnifying glass.
   Description - Have each child first immerse his hand in the finger paints then place his hand imprint on the white paper. When the paint is dry, allow each child to examine the hand print with the magnifying glass.

2. Classroom Activity. "What's Missing".
   Level - Ages 4-5 Type - Group
   Materials - 5" by 7" flashcards with facial features on them.
   Description - The teacher shows children flashcards and has them point out facial features that are missing - eye, hair, ear, etc.
   Special Adaptation - Add hearing aid -molds. This activity can also be used with an overhead.

3. Classroom Activity. "Composite Pictures".
   Level - Ages 4-7 Type - Group
   Materials - stand-up mirror; china marker; small cards showing various body parts; chalkboard and chalk.
   Description - Have each child select one body part card and identify that part verbally or by pointing to his own body part. The teacher will then draw the child's body part on the mirror with a china marker using the child's mirror image to trace. Have each child select and identify a body part card and have his body part traced until a completed figure appears on the mirror. A key to whose parts are where can be printed on the chalkboard.

4. Classroom Activity. "Tactile Identification of Body Parts".
   Level - Ages 4-7 Type - Group
   Description - Blindfold one child at a time. With one hand have him touch and identify the part of another child's body that he touched.

5. Classroom Activity. "Simon Says".
   Level - Ages 4-8 Type - Group
   Description - The children must follow the teacher's directions. If the teacher says, "Simon Says, 'put your hands on your head' ", or "Simon Says, 'put your hands on your knees' ", he must do it. However, if the teacher gives any directions without first saying "Simon Says", the child or children who follow it are out. Give each child a chance to be the leader.

6. Game. "Domino Match".
   Level - Ages 4-6 Type - Small Group
   Materials - teacher-made dominoes with shapes drawn on them.
   Description - Divide the dominoes among the children playing. One child will place a domino down, and the child next to him must match either of the shapes on the first child's domino. Game proceeds as for regular dominoes.

7. Classroom Activity. "Wallpaper Matching".
   Level - Ages 5-7 Type - Group/Individual
   Materials - 2 sections of each wallpaper piece; scissors; glue; large sheet of tagboard; box.
   Description - Glue one section of each wallpaper piece on the tagboard. Place the other sections in a box. Have the children pick a piece of

7. (Cont'd) wallpaper section and match it to a piece mounted on the tagboard.

8. Classroom Activity. "What's Hiding?".
Level - Ages 5-7 Type - Group/Individual
Material - overhead projector; transparencies; a variety of pictures of different objects.
Description - Have the child try to find the hidden object in a transparency with an overlay on it. Add more overlays to increase the level of difficulty.

9. Classroom Activity. "Find the Form".
Level - Ages 5-10 Type - Group/Individual
Materials - teacher-made pictures made from a variety of shapes, numbers or letters; crayon.
Description - Have the children find different shapes, numbers, or letters, in a variety of pictures. Have them circle as many different forms as they can find.
Note - The class can be divided in teams or individual students can locate the hidden forms in a competitive activity.

10. Art. "Color-by-Number".
Level - Ages 7-10 Type - Individual
Materials - teacher-made dittoes of a picture, outlined only, and sectioned with a number (coded to colors) in each section; crayons.
Description - Have the children color their pictures according to the color code, i.e., 1 = red, 2 = blue, 3 = yellow, etc. Have them identify the completed picture. The children can make up their own color-by-number pictures if they like.

11. Classroom Activity. "Hop to It".
Level - Ages 4-6 Type - Group
Materials - teacher-made separate drawings of a circle, square, triangle, and rectangle - enough for each child; chalk.
Description - With the chalk draw a large circle, square, triangle, and rectangle on the floor. Pass out a drawing, face down, to each child. On the count of 3, the child must turn over his card and hop to the middle of his corresponding shape drawn on the floor. The first team to hop to their corresponding shape is the winner. Mix cards and change the format of hopping to skipping, jumping, walking backwards, etc., to the chalk-drawn shapes.

12. Game. "Scavenger Shape Hunt".
Level - Ages 7-10 Type - Small Group
Materials - teacher-made slips of paper with various shapes and the number or shapes a child must find; paper; pencils.
Description - Divide the class into teams of 3-4 children each. Give each team a slip of paper and instruct the teams that they must find as many objects in the classroom in the form of that shape as is written on the paper. For example; 3 circles could be a clock, a lamp, a hat, etc. Have the children write those objects on a piece of paper. The first team to finish with the correct objects and number of objects is the winner.

13. Art. "Fun With Shapes".
Level - Ages 4-7 Type - Individual
Materials - pre-cut shapes such as circles, squares, rectangles, and triangles of assorted colors; paste; construction paper.
Description - Provide each child with a piece of construction paper. Give each child a number of every shape that he can identify and have him create a picture with those shapes.

14. Art. "Create a Picture".
Level - Ages 5-8 Type - Individual
Materials - a large selection of pre-cut different sized shapes; construction paper; paste.
Description - Have children spread a thin layer of paste over the construction paper. Have each child grab a handful of pre-cut shapes and drop at random on the paper. Display finished creations around the room and discuss the variety of shapes each child used.

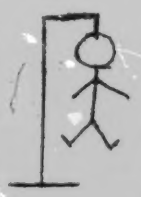
15. Classroom Activity. "Classroom Design".
Level - Ages 5-7 Type - Group
Materials - separate pictures of different shapes such as; a circle, a square, a rectangle and a triangle; chalkboard and colored chalk.
Description - Hold up a picture of a shape and ask the children one at a time to identify that shape. If he does so correctly, he may choose a colored piece of chalk and draw that shape on the board. Do this until each child has a turn identifying the shape but adding the drawn shape to the ones on the board. The end result will be a design completed by the entire class.

16. Classroom Activity. "Puzzle Match".
Level - Ages 4-6 Type - Group/Individual
Materials - teacher-made 12" x 18" tagboard picture with a puzzle outline drawn over the picture; identical picture cut into puzzle pieces as outlined on the intact paper.
Description - Have the children place the picture pieces in the appropriate place on the intact tagboard matching the parts to the correct outline.

17. Game. "Face Puzzles".
Level - Ages 5-8 Type - Group/Individual
Materials - child-made individual face drawings cut into puzzle pieces.
Description - Place 3-4 children's disassembled puzzles on the table. Have the children race to see who can assemble his puzzle the fastest. A variation of this activity can be to mix four children's pieces together and race to sort and assemble the puzzles.

18. Classroom Activity. "Story Sequencing".
Level - Ages 6-10 Type - Group
Materials - chart paper; scissors.
Description - Write-up an experience chart on a current happening and have the children read it. Next, cut the story into 3 or 4 strips and have the class re-structure the strips back to their proper order.
Note - This is also an excellent activity for sequencing and ordering.

19. Game. "Hangman".
Level - Ages 8 and up Type - Group
Description - Have a child think of a word and write a dash for each letter in the word. The rest of the class must ask the child if his word contains certain letters. If the word does, the child must write in that letter in the appropriate blank. If not, the child draws a part of the hangman (see below). The class must guess what the word is before the hangman is completely drawn.



HOMEWORK

20. Classroom Activity. "Silhouettes".
Level - Ages 6-10 Type - Group
Materials - teacher-made objects such as animals, fruits, toys, etc., cut from construction paper; and an identical silhouette cut from black construction paper.
Description - Place pictures of objects on the chalktray. Show the class the silhouettes of each object one at a time. Have the children pick the corresponding picture of the silhouette from the pictures on the chalktray.

21. Art. "Drawing From a Bird's Eye View".
Level - Ages 7-10 Type - Individual
Materials - paper; crayons.
Description - Have the children look at objects such as a turtle, a desk, a table, an apple, etc., from above and try to draw what they see. When all the children are finished, let them guess what each picture is.

22. Classroom Activity. "Alphabet Train".
Level - Ages 6-9 Type - Individual/Group
Materials - 26 small milk cartons with the tops cut off and labelled with one letter of the alphabet on each carton; tagboard wheels fastened on with brass paper fasteners to each carton; yarn to link the cartons together forming a train; two or more words beginning with each sound of the alphabet written on slips of paper.
Description - Have each child take a slip of paper with a word on it and put it into the alphabet train according to its beginning sound. Have children add new vocabulary words to the train.

23. Classroom Activity. "The Letter Flower".
Level - Ages 6-10 Type - Group/Individual
Materials - a large teacher-made flower of construction paper with a supply of separately cut petals; crayon; tape.
Description - Tape the stem, leaves, and the flower center to the blackboard. Write the letter "W" in the center (or whatever sound you are working on) and ask the children to think of a word that begins with that letter. Let the child write his word on a petal and tape the petal to the flower center. Add words until the flower is completed.

24. Classroom Activity. "Name That Sound".
Level - Ages 5-8 Type - Group
Materials - a variety of noisemakers such as a bell, a drum, a rattle, etc.
Description - Have the children close their eyes as you choose a noisemaker and make a noise with it. The children must identify the object that was used. Have the children take turns being the leader and choosing an instrument.

25. Classroom Activity. "Select a Sound".
Level - Ages 5-10 Type - Group/Individual
Materials - language master and language master cards.
Description - Have each child imitate the sound of an animal or a familiar object in the language master. After each child has had a turn, play all the cards for the class and have them try to guess what the sounds are.

26. Fieldtrip. "A Sound Trip".
Level - Ages 5 and up Type - Group
Materials - tape recorder.
Description - Take a trip with the class and tape the different sounds you hear. In class play the tape and have the children guess what the sounds are.

27. Classroom Activity. "Animal Sounds".
Level - Ages 6-9 Type - Group
Materials - teacher-made animal cards with picture or name on each card; microphone.
Description - Let each child secretly pick an animal card. Have them take turns using the microphone and imitating the sound of the animal they picked with a piece of paper covering the speaker's lips. See who is the first to guess what animal is being imitated.

28. Classroom Activity. "Pass the Tambourine".
Level - Ages 5 and up Type - Individual/Group
Materials - tambourine or a cereal box filled with pumpkin seeds and tightly sealed.
Description - Have the children sit in a circle. Choose one child to be the leader and have him tape a simple pattern on the tambourine such as 2 long taps, 2 short taps, 2 long taps, etc. Have the leader choose a child to copy the exact pattern using the tambourine. If he can do so successfully, he becomes the leader.

29. Classroom Activity. "Marching Corps".
Level - Ages 5 and up Type - Group
Materials - marching records; record player.
Description - Have a child lead the rest of the class in a march to a favorite marching record. The leader must set a pattern for the others to follow such as skipping for 4 beats, walking for 4 beats, sliding for 8 beats, etc. Have the children take turns being the leader.

30. Classroom Activity - "Forward March".
Level - Ages 6 and up Type - Group
Materials - gym whistle.
Description - Have the children move in various pre-determined patterns at the sound of the gym whistle. For example, march straight ahead - blow whistle once; turn right - 2 blasts; turn left - 3 blasts, etc. Add more patterns as the class progresses.

31. Classroom Activity. "Glass Menagerie".
Level - Ages 7 and up Type - Group
Materials - 8 glasses each filled with a different level of water to form a major scale; 8 spoons.
Description - Line up 8 glasses on a table from the lowest level of water to the highest. Give 8 children a spoon each and have each one of them stand behind a glass. On cue the child will lightly tap the glass when the teacher points to it. Cue the class in a familiar song such as "Jingle Bells".
Special Variation - After the group has become proficient in the song, cue them in the same song but in a different rhythm pattern. Have them tell you what's wrong.

32. Classroom Activity. "... _ _ _ ... / .._. .._ _."
Level - Ages 8 and up Type - Individual/Group
Materials- teacher-made ditto of the Morse Code, as follows:

A ._	H	O _ _ _	U .._
B _...	I ..	P ._ _.	V ..._
C _._.	J ._ _ _	Q _ _ ._	W ._ _
D _..	K _._	R ._.	X _.._
E .	L ._..	S ...	Y _._ _
F .._.	M _ _	T _	Z _ _ ..
G _ _ .	N _.		

Description - Give each child a copy of the Morse Code and have him learn it on his own time. When each child becomes somewhat proficient, have him send by memory or by looking at his sheet, messages to each other.
Special Adaptation - Hand squeezes, i.e., a short squeeze is a dot and a long squeeze is a dash, can be substituted for tapping out a message.

33. Classroom Activity. "The Cylinders".
Level - Ages 4-6 Type - Individual/Group
Materials - cardboard tubing cut into 1/2" graduated pieces and spray painted different colors.
Description - Have the children take turns ordering the graduated cardboard tubes in a progressive row.
Note - This activity can be done using identical bottles filled with colored water graduated at 1/2" intervals in each bottle and having the child order them from the most to least amount of water.

34. Classroom Activity. "Big, Bigger, Biggest; Small; Smaller, Smallest".
Level - Ages 4-6 Type - Group
Description - Starting with three children, have the class arrange them according to size; i.e., small, smaller, smallest; and big, bigger, biggest. Add more children as the class becomes more proficient.

35. Classroom Activity. "Footprints".
Level - Ages 6 and up Type - Group/Individual
Materials - dark construction paper; scissors; pencil.
Description - Show children how to make a pattern of their foot and allow each child to trace and cut out his own feet. Measure objects in and around the room or distances in footsteps: see who has the longest footprint and who has the shortest.

36. Game. "Follow the Leader".
Level - Ages 4-6 Type - Group/Individual
Description - Build a maze in the classroom with the furniture available capitalizing on under, on top of, around, etc. Choose a leader and have the rest of the class follow him. The maze itself can be lengthened and made more difficult.
Note - Observation of coordination problems and memory span abilities are also made possible through this activity.

37. Art. "Hand-Sewn Pouches".
Level - Ages 5-7 Type - Individual
Materials - pre-cut 15" x 15" brown paper pre-punched around 3 edges with a paper punches; yarn; craons.
Description - Give each child two pre-cut, pre-punched papers and a supply of yarn. Following the teacher's example, show the class how to sew (with a simple stitch) the pieces together. Stress positional words in your demonstration, i.e., "over the top hole", "under the bottom hole", etc. Sew all 3 edges and leave about a yard of yarn at the top for a shoulder strap. Have the children decorate and wear their pouches.
Note - These pouches can be used for collecting individual valentines on Valentines Day.

38. Classroom Activity. "Projected Positions".
Level - Ages 5-8 Type - Group
Materials - overhead projector; transparencies; colored marking pens.
Description - Present the class with an overhead projection of various objects such as a house, a table, a bed, a chair, a car, etc. Place another transparency such as a ball, a cat, a bird, a box, etc., in various positions in relation to those first objects. For example, a transparency of a ball can be positioned so it is on top, below, or above the table. Have the children discuss "where" the object is.

39. Classroom Activity. "Positional Pictures".
Level - Ages 5-8 Type - Group
Materials - teacher-made photos of children in the class in various positions such as under a table, on top of the slide, etc; slot chart with the positional words (under, over, on top of, etc.) printed on it.
Description - Have the children take turns drawing photos out of a hat and matching them to their position word on the slot chart.
Note - This activity can be done with a movie camera or video tape equipment and a stop-action switch on the projector.

40. Game. "What Am I Thinking Of?".
Level - Ages 6-10 Type - Group
Description - Have each child think of an object in the room and keep it a secret. In turn each child gives 3 clues as to what the object is according to its location. He must use positional words such as "above", "below", "across from", etc., only. The other children must try to guess what the object is. For example, "I am below the ceiling", "I am above the floor", "I am across from the clock", -- answer - "flag".

41. Classroom Activity. "Near and Far Away".
Level - Ages 6-10 Type - Group
Materials - polaroid or movie camera; yardstick.
Description - Take polaroid or moving pictures (with a stop switch on the projector) of objects from close up or far away. With the class, measure the apparent size of the object as seen from a distance. Approach the object and measure its true size.
Variation - Magnifying glass, binocular, telescope, or microscope, etc., can also be used with this activity.

42. Classroom Activity. "Real and Imaginary Animals".
Level - Ages 4-7 Type - Group/Individual
Materials - photographs and magazine pictures of real animals; drawings and cartoons of fantasy animals (including animals that wear clothing or are personified in some way).
Description - Mix both types of animal pictures together in a pile and have the children take turns drawing a picture from the pile. Have them classify the picture as a "real animal" or "pretend animal".

43. Creative Writing. "Babaganoush is Coming".
Level - Ages 7-10 Type - Group
Materials - approximately 8 large feet cut out of construction paper; masking tape.
Description - When the children are not present, tape the footprints on the walls and ceiling of the classroom and write "Babaganoush is Coming" on the board. Do so everyday for about a week and acting just as surprised as the children are when they discover this. When the week is over, encourage the children to write a story on who or what they think Babaganoush is. Have them read aloud their stories to the class before revealing who Babaganoush really is.

44. Classroom Activity - Song. "The Hokey Pokey".
Level - Ages 5 and up Type - Group
Description - Have the class form a circle facing the middle. Sing the "Hokey Pokey" having the children put a certain body part in the inside or outside of the circle.
Special Adaptation - As you will note, this activity can also be used for identifying body parts.

45. Classroom Activity. "Similarity in Objects".
Level - Ages 4-6 Type - Group/Individual
Materials - different sets of objects that are similar in form and function such as sandle-shoe; magazine-book; pencil-pen, etc.
Description - Separate the objects into 2 groups. Have the children match the objects from group A to the objects in group B.

46. Game. "Bean Bag Classification Game".
Level - Ages 5-7 Type - Individual/Group
Materials - teacher-made word cards with pictures of animals, foods, clothing, and tools; four master cards with pictures of a barn, a refrigerator, a closet, and a tool box; a bean bag.
Description - Randomly place all of the word cards face down on the floor and the 4 master cards on the chalktray. Have each child toss a bean bag and take whatever card he hits. He must then classify that card according to its appropriate master card. For example, cake-refrigerator; hammer-tool box, etc.

47. Classroom Activity. "Who Goes Where and Why".
Level - Ages 5-9 Type - Group
Description - Group the children in your class according to a chosen detail such as everyone with white socks in one group A. Allow one student with white socks to be in group B. Pick one student to discover which student in group B belongs with group A and tell why. Switch off - grouping by different details, i.e., color of hair, eyes, who has a belt on, clothing color, girls, boys, etc. Then let children arrange the groups.

48. Game. "Function Concentration".
Level - Ages 6-10 Type - Small Group
Materials - teacher-made set of cards with pictures of objects and functional relationships of those objects - each on a different card. For example, key-lock, etc.
Description - Turn the cards over in even rows. The child must match the correct object with its function in order to keep those cards. If he cannot, make a match the cards are turned over for the next child. The child with the most cards at the end of the game is the winner.

49. Game. "Functional Dominoes".
Level - Ages 6-10 Type - Small Group
Materials - teacher-made set of dominoes using pictures of objects with functional relationships such as key-lock, etc.
Description - Play as commercial game of dominoes, only matching functional parts rather than dots.

50. Classroom Activity. "Find the One That's Different".
Level - Ages 3-5 Type - Group
Materials - a number of felt animals as well as a number of other objects; flannel board; a large felt "X".
Description - Place three felt animals and a fourth object on the flannel board. Have the children place either the large felt "X" over the different object or correct it by replacing the wrong object with another animal.

51. Classroom Activity. "Changing Categories".
Level - Ages 3-8 Type - Group
Materials - pictures of all kinds of ? specific category such as animals mounted on construction paper.
Description - Show four pictures to the children at one time. Keep changing the category of the animals such as 3 fat animals and 1 skinny animal, 3 farm animals and 1 jungle animal, 3 water animals and 1 land animal, 3 types of monkeys and 1 ape, etc. Have the children identify the inappropriate card.

52. Art. What's Wrong?".
Level - Ages 6-10 Type - Group/Individual
Materials - paper; crayons.
Description - Allow each child to think of and draw their own absurd situation where things are not used for the proper function. For example, putting mittens on feet, fishing with a spoon, etc. When everyone is finished let each child hold up his picture for discussion of what is wrong.

53. Game. "Old Maid".
Level - Ages 4-7 Type - Small Group
Materials - a commercial deck of "Old Maid" cards or a teacher-made deck of cards consisting of unit vocabulary or whatever group of pairs desired by the teacher plus 1 card without a mate.
Description - Deal each child an equal number of cards. Each child will make pairs of like objects with the cards dealt him by picking a card at random from the player to the left of him. The game procedes counter-clockwise until there is the one card without a mate. The child with the one card left is the loser, the child with the most cards, the winner.

54. Game. "Domin-o'-Pair".
Level - Ages 4-7 Type - Small Group
Materials - teacher-made set of dominoes with 1 part of a pair such as animals on each half of the domino.
Description - This is played as a regular game of dominoes with the exception of matching pairs rather than dots.

55. Game. "Pair Match Concentration".
Level - Ages 5 and up Type - Small Group
Materials - teacher-made deck of cards of matching pairs of objects or words.
Description - Place all cards face down on table or floor. Each child will turn up 2 cards in turn. If they are a pair, he keeps them and takes another turn. If not, the cards are turned face down again and the next child takes his turn. Continue until all the pairs are uncovered. The child with the most pairs at the end of the game is the winner.

56. Art. "3-D Pairs".
Level - Ages 7 and up Type - Individual
Materials - construction paper; scissors; crayons.
Description - Give each child a sheet of construction paper and have him fold it in half. Have him draw and cut a design so that part of his design will be attached to the fold. The two identical forms will be attached and will stand as a 3-dimensional form.

57. Classroom Activity. "Jars and Lids".
Level - Ages 3-5 Type - Individual
Materials - a variety of different-sized jars with their corresponding lids.
Description - Have the child put each lid on its corresponding jars. Have the children use a stop watch to time themselves and compare with each other.

58. Classroom Activity. "Nuts and Bolts".
Level - Ages 3-5 Type - Individual
Materials - a variety of different-sized nuts and corresponding bolts.
Description - Have the child screw each nut into its corresponding bolt. This activity is self-checking.
Special Adaptation - Have the children predict which bolts go with which nuts before they try them.

59. Classroom Activity. "Corks".
Level - Ages 3-5 Type - Individual
Materials - a variety of different-sized corks and nonskid chair leg tips to fit the corks.
Description - Have the child put each cork inside its corresponding rubber tips. After the corks have all been placed correctly, the child can group them according to sizes or try it blind folded.

60. Classroom Activity. "Mail My Letter".
Level - Ages 4-7 Type - Individual
Materials - various size pieces of cardboard and matching size envelopes.
Description - Have each child put the correct cards in their appropriate envelopes.

61. Classroom Activity. "Classification Cut-out".
Level - Ages 7-10 Type - Individual/Group
Materials - old magazines; scissors.
Description - Let the children cut pictures of objects that appeal to them out of magazines. Place all the pictures in a pile and have the children try to group 4 or 5 pictures together and explain the criteria they used for grouping.

62. Classroom Activity. "Blue Eyes/Brown Shoes".
Level - Ages 7-10 Type - Group
Description - Choose one child as the leader. Have him group the class by some particular similar attribute such as blue eyes or brown shoes, etc. The rest of the class must guess what the attribute is.

63. Classroom Activity. "Sorting Box".
Level - Ages 3-5 Type - Individual
Materials - large box filled with different hats, shoes, and gloves, etc.
Description - Have the child empty the box and sort all the objects into separate piles of the same type.

64. Game. "The Same/Different Game".
Level - Ages 3-6 Type - Individual
Materials - 3" x 5" teacher-made tagboard cards with 2 objects on each card. Each card will show either similarities or differences between the two objects such as 2 circles, a circle and a square, a triangle and a dog, etc.
Description - Have the child sort through the cards one at a time and decide whether the pictures are the "same" or "different". If they are the same, they are placed on the right side. If they are different, they are placed on the left.

65. Game. "Scrambled Shapes".
Level - Ages 4-6 Type - Individual
Materials - tin foil pan with cover; any number of large, medium and small 3-dimensional triangles, circles, and squares of various colors.
Description - Place all the shapes in the pan and shake, scramble, and spill on the floor. The child must sort and group the same shapes together in separate piles. This activity can be timed for speed and accuracy.

66. Game. "Category Go Fish".
Level - Ages 4-8 Type - Small Group
Materials - teacher-made deck of approximately 52 cards with categories such as animals, vehicles, vegetables and buildings instead of numbers and suits. Include the name of the category as well as the name of the object on each card.
Description - Deal each child 4 cards and spread the rest of the deck of cards face down in the middle. Child must match 3 cards of same category for a set. Game procedes clockwise with first child asking, "Do you have any animals?" etc. If the child has an animal he must provide the correct name and surrender it to the first child. If not, the first child must "Go Fish" and select a card from the pile. Only 1 turn per child. The child with the most cards at the end of the game is the winner.

67. Game. "Class and Color Categorizing".
Level - Ages 5 and up Type - Individual
Materials - cut-out pictures or drawings of many fruits and vegetables as well as many other foods.
Description - Have the child first sort the fruit and vegetables from other food types. The fruits and vegetable pictures are then sorted by color.

68. Project. "Classification Rack".
Level - Ages 6-10 Type - Group
Materials - oak tag; scissors; magazines; marker; coat hangers; paste.
Description - The children cut out pictures from magazines of members of various categories being studied. For example: fruits - pictures of peaches, apples, oranges, and bananas, etc. Paste the objects on the oak-tag under the title of the category. Next, take a coat hanger and attach the poster board with clothespins. Hang in the reference corner of the room where their use can be easily accessible by the children.

69. Experiment. "Float and Sink".
Level - Ages 4-6 Type - Group
Materials - assorted objects that float or sink (try to include some that look similar but have the opposite reaction such as; Ivory soap and Camay soap, ebony and pine wood); container with water in it.
Description - Through trial and error determine with the class whether each object sinks or floats when placed in water. Make a list of each category and the appropriate items under each category.

70. Classroom Activity. "Weight Boxes".
Level - Ages 5-9 Type - Individual
Materials - various objects of 2 sets each of the same exact weight.
Description - Have the child sort through the various objects to find the two of identical weight. If the child has great difficulty, use a simple balance to weigh the objects.
Special Adaptation - As the child becomes proficient, have him order the objects according to graduated weight.

71. Classroom Activity. "Down the Hatch!".
Level - Ages 4-6 Type - Group/Individual
Materials - pictures from magazines as follows; bowl of soup, glass of tomato juice; plate with meat, potatoes, vegetables; plate of ice cream.
Description - Have children volunteer to place on the chalktray the correct order or a several course dinner. Add more courses as the class becomes more proficient as well as preparation to cleaning up.

72. Classroom Activity. "The Age Cycle".
Level - Ages 4-6 Type - Individual/Group
Materials - pictures of humans at various stages of development, i.e., baby, child, teenager, adult, senior citizen.
Description - Have the children correctly order the pictures according to age, from young to old.

73. Art. "Intermediate Imaginings".
Level - Ages 6-10 Type - Individual
Materials - paper; crayons; 2 pictures related to one another.
Description - Show the children the two pictures which are related to each other. Have each child create, on two sheets of paper, two imaginary events that could possibly have occurred between picture 1 and picture 4.

74. Dramatization. "Ante Stories".
Level - Ages 6-9 Type - Group
Description - Have a group of children act out the last part of a story such as "Little Red Riding Hood" or "The Three Pigs". The rest of the class must try and guess what happened in the beginning of the story.

75. Art. "Pre-determining Pictures".
Level - Ages 7-10 Type - Individual
Materials - books, movies or filmstrips that follow an object in an ordered series of events, e.g., oranges - tree to table; an apple; egg; flower, etc.
Description - Show and discuss the object you viewed with the children step by step. Next, show the class the apple, egg, and flower, and have them draw pictures in sequence of one of the objects and how it arrived in the school. Each child's work can then be discussed by the group.

76. Creative Writing. "Once Upon a Time".
Level - Ages 8 and up Type - Individual
Materials - teacher-made dittoes of an original story with only the last paragraph appearing on the bottom of the ditto.
Description - Give each child a copy of the ditto and have him create a beginning to the story that ties in to your ending. When completed, have each child, as well as the teacher, read aloud his story. Have the class decide on the best beginning.

77. Classroom Activity. "Inferring Outcomes".
Level - Ages 5-8 Type - Group
Description - Tell the children a story but don't give the ending. Have children verbally supply the ending for you. After the class decides what is the best ending among them, read the real ending and compare.

78. Classroom Activity. "Patterns and Patterning".
Level - Ages 6 and up Type - Individual
Materials - teacher-made dittoes of patterns such as the following:

Description - Make up a regular pattern either by color, number, shape, or size. Allow the child to decide what comes next. These can be from simple to very involved. Afterwards, the children can make up their own patterns for the class to follow.

79. Experiment. "What Would Happen If...".
Level - Ages 6 and up Type - Group
Materials - milk; syrup; paints; food coloring; paper towels; water, etc.
Description - See who can guess what will happen when you a) put chocolate into milk, b) drop food coloring on a wet paper towel, c) leave water in a dish for a few days, d) put ice cubes in the sun, e) add detergent to water and swish, f) poke a balloon with a pin, etc. Have the children make up their own experiments and present them to the class.

80. Demonstration. "Eating Fun".
Level - Ages 7-12 Type - Group
Materials - chopsticks; various foods.
Description - Show the children how to hold the chopsticks and give each child a pair. Pass out several kinds of food. Discuss and write down the probable consequences of using chopsticks for the first time. Afterwards point out where the children correctly predicted the consequential events.
Note - If possible, video tape the children trying to eat with chopsticks. Show the tape and point out the sections where the children had predicted correctly. The video tape can be viewed for enjoyment later on.

81. Creative Writing. "...And So They Lived Happily Ever After".
Level - Ages 8 and up Type - Individual
Materials - teacher-made dittoes of the beginning paragraph only of an original story written on the top of the page.
Description - Give each child a copy of the ditto and have him create an ending to the story that ties in to your beginning. When completed, have each child, as well as the teacher, read aloud his story. Have the class decide on the best ending.

82. Classroom Activity. "Picture Pumpkin Sequencing".
Level - Ages 5-10 Type - Group
Materials - pumpkin; carving knife; Polaroid camera.
Description - Carve a pumpkin with the class. Take a picture of each step of the carving as well as a picture of the pumpkin before carving, and the final jack o' lantern. Afterwards, have the children take turns sequencing the pictures.
Special Adaptation - The pictures can also be used as a basis for an experience story chart.

83. Classroom Activity. "Comic Strip Zips".
Level - Ages 6 and up Type - Group/Individual
Materials - comic strips from the newspaper.
Description - Give each child a newspaper comic strip which has been cut into its frames and mixed up. (The reading level and sophistication of the children should be considered in the choice.) Have the children sequence the frames so that they tell a logical and funny story.

84. Classroom Activity. "Dressing".
Level - Ages 4-6 Type - Individual/Group
Materials - male and female manikins, and appropriate clothes for each from underwear to outerwear.
Description - Have a child dress a manikin (male if the child is male, or female if the child is female) from underwear to outerwear. Have older children name each article of clothing.

85. Race. "Sequencing Race".
Level - Ages 5-8 Type - Small Group
Materials - sequence cards or sequenced Polaroid pictures - set per team.
Description - Place all the cards at random in the chalktray. Divide the pupils into teams and give each team one set of cards. The first team to pick out and arrange their cards in the correct sequence wins.

86. Art. "Story Boards".
Level - Ages 5 and up Type - Group/Individual
Materials - large roll of shelf paper; brushes; paints; crayons; paper; scissors; glue.
Description - Select a topic that the class would like to depict. Roll the shelf paper across a bulletin board or wall and divide it into sections with a marker. Let each child work on one section using any art materials available. When completed, have each child relate his section to the class.

87. Classroom Activity. "Round Robin".
Level - Ages 6-10 Type - Group
Description - Have one child start a story and stop him after a minute or so. Have other children continue the story around the room until everyone has had a turn.

88. Project/Classroom Activity. "The Plant Process".
Level - Ages 7-12 Type - Group
Materials - Polaroid camera; plant seeds; soil; pot.
Description - Have the children plant seeds in a pot in class. Take pictures of each step from the very beginning to the end when the plant has sprouted. Show the class these pictures of themselves working on the project for a sequencing activity and as a realization that there is usually an orderly process behind the completion of a product.

89. Dramatization. "Buying Shoes".
Level - Ages 4-6 Type - Group
Materials - 1 pair baby shoes; 1 pair men's shoes or very large shoes; 1 pair child's shoes; chairs; costuming.
Description - One child pretends to be buying shoes while another, the shoe salesman, offers to try on very large shoes, very small shoes, and finally, the correct size shoes. Involve the group by asking, "Are these OK?", etc.

90. Classroom Activity. "I've Got a Problem".
Level - Ages 6-9 Type - Group
Materials - box of play clothes and various objects.
Description - The teacher will create a problem, for example, by putting shoes on the wrong feet or a coat on backwards, etc. The children must first recognize the problem and then tell or demonstrate a solution to her. The children may then use the clothes in the box to create their own problems for the other children to solve.

91. Classroom Activity. "What Fits?".
Level - Ages 3-5 Type - Group
Materials - children's and adult's clothing.
Description - Present a child in class with an infant's sweater, a large man's jacket, and the child's own coat. Have the class determine which is the proper size. Repeat this activity using shoes, gloves, hats, etc.

92. Classroom Activity. "The Question/Answer Game".
Level - Ages 4-6 Type - Individual/Group
Materials - Picture cards of real life solutions for real life questions such as a picture of the sun and the moon to answer the question, "When do you sleep?".
Description - Line the picture solution cards on the chalktray and present the problem question to the class. Have them select the correct picture that solves the problem.

93. Fine Motor. "Buttoning".
Level - Ages 3-5 Type - Individual
Materials - child's own sweater or coat with buttons.
Description - Place child's sweater or coat on table or floor and ask child to button it correctly. After practice, this activity can be timed to increase skills.
Note - This procedure can also be followed for tying a bow on shoes.

94. Game. "Memory List".
Level - Ages 8 and up Type - Group/Individual
Materials - a number of common objects such as a crayon, a spool of thread, a cookie, a cup, etc., placed on a tray; paper; pencils.
Description - Pass the tray around the class and have the children look at all the objects for not more than 30 seconds. After looking at the tray, the children must write on their paper as many objects as they can remember. The child with the most correct objects is the winner.

95. Art. "Colors".
Level - Ages 7 and up Type - Group
Materials - red, yellow, blue, white, black, paints; brushes; paper.
Description - The children are only given the 3 primary colors. Tell the class that you would like them to paint a picture using the 3 colors they have as well as using purple, green, and orange. Have them collaborate as to a solution

95. (Cont'd)
to this problem. Display finished pictures.
Special Adaptation - Have older children make different shades of the colors with white and black paints.

96. Classroom Activity. "Picture Completion".
Level - Ages 4-7 Type - Group
Materials - chalkboard; chalk
Description - The teacher will start by drawing an object on the board with a part of it missing. For example, a car with a wheel missing. The child who correctly identifies the object and the missing part will have a turn at the chalkboard. More than one part of an object can be missing as the group becomes more proficient.

97. Classroom Activity. "Cause and Effect".
Level - Ages 7-10 Type - Group
Materials - separate pictures of cause and effect relationships.
Description - Show the class the pictures of cause and effect relationships such as heavy clouds-rain; children playing with matches-fire, etc. Have the pupils match the cause with the effect and discuss their choices. Have the class write stories and draw pictures about cause and effect relationships for reinforcement.

98. Project. "The Pie Producers".
Level - Ages 8 and up Type - Group
Materials - recipe; ingredients and utensils required to bake a pie; charts listing ingredients; recipe.
Description - Encourage the children to make a pie together on their own. The children can decide what kind of pie they would like to bake, make a list of ingredients and utensils needed, discuss directions, baking, and cleaning up.

99. Classroom Activity. "Who's Responsible?".
Level - Ages 4-6 Type - Group
Materials - pictures of community helpers.
Description - Line up the community helper pictures on the chalktray. Describe a responsibility of a community helper and have the children point out the correct picture.
Special Adaptation - This activity can also be used for units dealing with the community and community helpers.

APPENDIX A-3

RELATED ACTIVITIES - THE PHYSICAL ENVIRONMENT

1. Art/Field Trip. "Nature Hunt/Nature Collage".
   Level. 4 years and older Type - Group
   Materials - Paper bag (to collect material); polyethelene bags (to preserve specimens); tagboard; paste.
   Description - Take the class to a nearby park. Encourage them to gather items such as leaves, grass, bark, rocks, twigs, etc. These items should not be too heavy. Upon returning to the classroom, identify, paste and label these nature items onto the tagboard to form a "Nature Collage".

2. Classroom Activity. "Environment Chart".
   Level. Ages 7 and over Type - Group
   Materials - Magazine pictures or drawings of different elements or life found in the environment; chart paper.
   Description - Have the children find magazine pictures or make drawings of different elements found in the environment. Place these pictures on one side of a chart. Divide the other side of the chart into two columns. On the top of one column write GOOD and on the top of the other, BAD. Discuss and label with the class what is good and what is bad about each picture on the chart and label in the appropriate column.

3. Classroom Activity. "Land, Water or Sky".
   Level. Ages 6-12 Type - Group
   Materials - Three poster boards: one with a land picture, one with a water picture and one with a picture of the sky placed at the top of each poster; an abundant supply of animal pictures from the three different categories.
   Description - Place posters on chalk tray. Scramble the pictures in a box and have the children take turns picking one picture each. Have the child decide whether it's a land, water or animal found in the sky and paste it on the correct poster. For vocabulary reinforcement, place the names of the animals found in each picture on the posters and have the child identify the verbal label and place it under the correct animal picture.

4. Classroom Activity. "Water Wheel".
   Level - Ages 7 and over Type - Group
   Materials - Photographs and/or magazine pictures of many water types such as: puddle, shower, harbor, pool, fountain, brook, lake, ocean, bathtub, glass of water, pond, faucet, ice, etc.; labels for each picture; large piece of tagboard cut into the shape of a wheel and divided into as many sections as you have different water types of.
   Description - Place each type of picture in one of the divided sections of the wheel and with the class, help label each picture. The children can build on the board gradually by adding facts about wildlife, uses, sports, etc. for each kind of water. (e.g. waterskiing in lake or harbor, jellyfish in sea, etc.)

5. Project. "The Earth's Surface".
   Level - Ages 5-8 Type - Group
   Materials - A large very shallow box and a large sheet of tagboard for a backdrop, flour and water, food coloring, blue paint, paint brushes, cotton, twigs, pebbles.

5. (Continued)
Description - Have the class work together on a model of the earth's surface. Mix the flour and water to form 'play-dough'. Assign each child a certain responsibility such as making mountains, hollowing out a mound of play dough to make a small lake surrounded by a bank, making grooves in the play dough for a stream or brook, etc. Food coloring should be added for a more realistic effect, (i.e. blue water, brown mountains, etc.) Twigs can be added for trees and small pebbles for rocks. With the blue paint, make a sky backdrop with cotton added for clouds. Afterwards, the children can add different kinds of animal life.

6. Art. "Underwater Art".
Level - Ages 5-7 Type - Individual
Materials - Paper, crayons, blue paint, paint brushes and water.
Description - Have the child draw a picture of water life such as fish, various rocks, underwater vegetation, etc. with dark vivid colored crayons. Then have the child paint over the entire picture with extra watery blue paint. The finished picture will have an underwater effect.

7. Project. "Earth Day is Every Day".
Level - All ages Type - Group/Individual
Description - Plan an "Earth Day" or "Pick up Litter Day" with your class. Have them work on some advance publicity such as posters, an assembly program, etc. to get others involved. Your class can concentrate their "Earth Day" around the school grounds. Be sure and stress that 'Earth Day is Every Day'.

8. Fieldtrip. "Fieldtrip to a Science Museum".
Level - Ages 9-11 Type - Group
Description - Take the class on a trip to the local museum to view rocks and rock formations. Concentrate your tour on the earth's surface, formation of the earth, elements that make up the earth, different rock formations of the earth, caves with stalagtites and stalagmites, etc. Discuss the events of the trip in class and make an experience chart.

9. Collection. "The President's Rock Collection".
Level - Ages 6-9 Type - Individual
Materials - different types of rocks.
Description - Tell the children that they are amateur geologists and that they have been asked by the President of the United States to find different types of rocks in their neighborhood for his rock collection. Either during school on a field trip to the park or during the children's spare time on the weekend around their neighborhood, have them seek out as many different types of rocks as they can find. Identify and label as many kinds of rocks as you can with the class. If there are some that you can't identify, take them to the museum where someone can help you. When all the rocks have been labeled, display them in some type of showcase where the children can view or touch them at any time.

10. Demonstration. "What is Erosion".
Level - Ages 9-11 Type - Group
Materials - Two separate metal pans each filled with mud or sand hardened into the shapes of mountains and hills; shower hose and tap; twigs and small pebbles.

10. (Continued)
Description - Have the children place the pebbles and twigs (to represent trees and other vegetation) into each of the two model mountains. With one of the boxes, use the shower hose connected to a water tap. This is to represent hard rains or high waters. Turn on the water and spray it over your model mountain. Ask the class to describe what happened. With the other model mountain, turn on the fan. This is to represent high winds and hurricanes or tornadoes. Ask the class to explain what happened. Now ask the class to think of ways that man can somewhat control soil erosion (i.e. irrigation ditches, reservoirs, rotating crops, etc.)

11. Project. "How We Can Stop Erosion".
Level - Ages 9-11 Type - Small Group
Description - Divide the class into small groups and have them select science projects they would like to do in the field of erosion. Some ideas you can give them are: models of farming with rotation of crops, irrigation ditches; a model of a dam, a bulletin board of various types of conservation of soil, etc. When the models and projects are complete, display them around the room and invite other teachers, students, parents and community leaders to visit.

12. Art/Meteorology. "Sky Watch at Day".
Level - Ages 6-11 Type - Group/Individual
Materials - Construction paper; cotton; glue.
Description - For several days, watch the sky during the day with the children. Take note of the various clouds and cloud formations you see and have the children create on construction paper with cotton and glue that cloud or cloud formation. Note the type of weather each cloud is associated with. i.e. big, white, puffy clouds with dark flat bottoms are called thunderheads - associated with rainstorms, etc. With younger chidlren, have a picture of a boy and a girl dressed for that type of weather underneath the appropriate clouds. With older children, have them label each cloud with the correct scientific name (i.e. cumulus, cumulo-nimbus, strato-nimbus, etc.) underneath the appropriate picture.

13. Astronomy. "Sky Watch at Night". Planetarium
Level - Ages 8-11 Type - Group/Individual
Materials - Poster paper; scissors; string; florescent paint; flashlight.
Description - For several nights at home, have the children observe the sky. In class, discuss what they have seen such as the moon, planets, stars, constellations, etc., and have them draw and paint what they have seen with florescent paint on both sides of the poster paper. Hang these objects with string from the ceiling in the room. In a darkened room and with a flashlight, have the children point out and identify what they see and tell something about it.

14. Astronomy/Demonstration. "The Phases of The Moon".
Level - Ages 8-11 Type - Group
Materials - Paper mache; black paint; string; flashlight.
Description - With the class, make a paper mache model of the moon and paint it black. Suspend it from the ceiling with a piece of string. Darken the room and turn on your flashlight. Tell the class that the flashlight is representing the light given off by the sun. Shine the light on the moon in different positions, i.e. straight on for a full moon, on the left for the last quarter, on the right for the first quarter, no light for dark moon, etc. Have the children identify and label the different phases of the moon.

15. Astronomy/Demonstration. "The Solar System".
Level - Ages 9-11 Type - Group
Materials - Names of the nine planets and the sun each written on separate sheets of paper, pins and a flashlight.
Description - Choose ten students to represent the nine planets and the sun. Pin the appropriate labels on each of the children and have the child who is the sun hold the flashlight to represent light. With the sun in the middle and stationary and the planets spaced around the sun in order of closest and farthest from the sun (i.e. Mercury closest and Pluto, farthest), have the children walk around the sun to show revolution. Have the children tell you which planet takes the longest time and which planet takes the shortest time to revolve around the sun and why. Draw conclusions with the class.

16. Astronomy/Demonstration. "The Earth, the Moon and the Sun".
Level - Ages 9-11 Type - Group
Materials - Three tags with the Earth, Sun and Moon written separately on each tag; flashlight; pins.
Description - Choose three children to represent the sun, the moon and the earth. Pin the appropriate labels on the students and have the sun hold the flashlight to represent light. Have the sun shine his light directly on the earth and the moon. Have the moon turn around (rotate) and at the same time circle (revolve) the earth. Have the earth turn around (rotate) and circle (revolve) the sun. Explain to the class that turning around is the movement called rotation and circling is called revolution. Discuss with the class what it is called when the earth is in darkness on one side and what it is called when the earth is in light (night and day), and what it is called when we can only see half of the moon, all of the moon or no moon at all. With older children, discussions could involve total and partial eclipses and equinoxes, etc.

17. Fieldtrip. "A Trip to the City/A Trip to the Country".
Level - Ages 5-8 Type - Group
Description - Take the children on a trip to the city and a trip to the country. Have them take note of the different environments associated with each trip such as tall building, paved streets for the city and farms and animals for the country. Create an experience chart together in class giving labels to the various items specific to each environment. You can also create a verbal story with the younger children on their trips. The older children can compose and read their own stories about their trips for the class.

18. Project. "City and Country Charts".
Level - Ages 7-9 Type - Individual
Materials - large sheets of paper; crayons.
Description - Have each child divide his paper into two parts to depict the environment of the city and of the country discussed in class. On the top of one column have them write CITY and on the top of the other, write COUNTRY. Have the child write and/or draw the appropriate labels that are characteristic of each environment. For example: CITY - apartments, stores, streets; COUNTRY - farms, barns, wildlife and animals, etc. Science research, vocabulary building and language can all be involved in this activity.

19. Dramatization. "Let's Play Farm".
Level - Ages 5-7 Type - Group
Materials - simple costuming of farm animals and farmer or pictures of a farmer and each farm animal pasted on tagboard and pinned to the children.
Description - Play-act life on a farm with a farmer and the farm animals. Assign each child a role to play and have him wear or pin on him the appropriate costume or picture. The child should be able to imitate the make and the sound of the animal. Your own story could develop or be developed for this role-play activity.

20. Classroom Activity. "Ice Cream Making".
Level - Ages 6-9 Type - Group
Materials - Crank or electric ice-cream freezer, rock salt, crushed ice, chopped fruit, flavors.
Description - Follow a recipe for ice-cream eliminating all flavoring. You should have a container of cream cooked with sugar when finished. Fill freezer container 1/4 full with cream mixture. Pack ice and salt. When cream begins to turn into ice cream, add fruit or flavorings. Do not use citrus fruit. Food coloring may be added where necessary. Language books (dairy) or just a story about the activity may be written.
Note - Most recipe books have recipes for ice-cream that can be made in ice-cube trays if a freezer is all that is available.

21. Classroom Activity. "Butter - the old-fashioned way".
Level - Ages 4-7 Type - Group
Materials - Two wooden spools, metal bowl, spoon, salt, 1 cup heavy cream.
Description - Put cream and spools in jar, screw end tightly and shake for about 20 minutes until butter forms. Pour into cold metal bowl and draw off buttermilk, add salt to taste.

22. Fieldtrip. "Shape Stick Walk".
Level - Ages 4-5 Type - Group
Materials - Teacher made shapes made of tagboard and mounted on popsicle sticks or tongue depressors.

Description - Take the class for a walk inside and outside the school. Each child is given a shape stick to carry with him on the walk. As the child carries it, he looks for the corresponding shape contained in various ways in the environment. Discuss in class the various objects found.

23. Art. "Shapes Collage".
Level - Ages 5-7 Type - Individual
Materials - A variety of magazines; scissors; construction paper; paste.
Description - Have each child identify and cut out different geometric shapes found in the magazines such as: a round clock, a rectulangular-shaped door, etc. The child can then paste these shapes on a sheet of construction paper to form their own individual collages.

24. Guessing Game. "I'm Thinking of a Shape . . . ."
Level - Ages 4-7 Type - Group
Description - The teacher looks around the room for a specific object in the form of a geometric shape such as: a round clock, a square bulletin board, etc. She then says to the class, e.g. "I'm thinking of a round shape in the room that tells you the time." The children will then try and guess what the object is. The winner will then have a chance to think of an object. If the class has difficulty guessing the object, other clues can be given.

25. Field Trip. "Plant Hunt".
Level - Ages 4-8 Type - Group
Materials - Bags to collect plant specimens.
Description - Take the class on a Field Trip to a nearby park. Have the children gather and identify various types of plant life. Later, in the classroom, classify and display according to size and shape.

26. Art. "Leaf Place Mats".
Level - Age 4 and up Type - Individual
Materials - Various leaves; waxed paper; iron; pinking shears.
Description - Have the children collect and bring into class various types and colors of leaves. On a sheet of waxed paper (about 9" x 12") have them arrange their leaf collection. Place another sheet of waxed paper(9" x 12") over the leaves, being careful not to disturb the arrangement. The teacher will then, with a cool iron, iron the two pieces of waxed paper together, and with the pinking shears, for a more decorative effect, pink around the edges. The finished place mats could be used everyday for snack time.

27. Art. "Acorn Cats".
Level - Ages 5-7 Type - Individual
Materials - acorns ; glue; yarn cut into 6" pieces; pine cone chips.
Description - Give each child an acorn. Have them curl a piece of yarn around their finger and then attach it with glue to the back of the acorn for a tail. With pine cone chips, glue ears, eyes, a nose and a mouth. Have the child make variations such as dogs, squirrels, chipmunks, etc. with any materials for features they could think of.

28. Art. "Plant Plaques".
Level - Age 9 and up Type - Individual
Materials - 8" x 11" pieces of cardboard covered either with sandpaper or burlap; metal fasteners; varnish; paint brushes; glue; an assortment of dried plants such as cattails, dock, wild flowers with a dry nature, sumac, wheat, oats, milk weed pods, etc.
Description - Have the children collect, identify and bring into class an assortment of dry-type plant life such as the above. Have the children arrange and glue the plant life on their plaques. Varnish carefully over the arrangement to preserve and to give it a glossy appearance. Attach a metal fastener to the back of the plaques and display.

Art. "Pine Cone Wreathes".

29. Level - Age 9 and up Type - Individual
Materials - metal hangers; shellac or varnish; paint brushes; 6" pieces of thin wire; an assortment of pine cones; ribbon.
Description - Have the children bring in an assortment of various pine cones to class. Have each child bend a metal coat hanger until it forms a circle. With a piece of wire, tie one end on the inside of a pine cone (so it doesn't show) and the other end tightly on a section of the coat hanger. Continue with the pine cones and wire until the whole hanger is covered with a variety of pine cones. Encourage each child to develop his individual variation. With a paint brush, cover the pine cones with either shellac or varnish. You may use anywhere from one to four coats depending on the kind of glossy effect you would like. When dry, tie a bow at the top of the hanger. Variations could include a few chestnuts, cranberries or a few wild flowers, etc. placed on your wreath for the effect you wish to maintain.

30. Experiment. "Comparison of Real and Fake Fruits".
Level - Ages 5-7 Type - Group
Materials - an assortment of real and fake plastic fruit.
Description - The teacher will start first with a real apple and a fake apple and ask the class if they look alike to the class. Choose a child and have him pick up the two objects. Ask him if they feel the same or if they feel different. Choose another child and have him take a bite from the real apple. Have him attempt to bite into the plastic apple. Ask him why are they different? Have the class draw conclusions. For reinforcement, mix all the fruit together and have the class choose and separate real from fake by the conclusions they came to.

31. Art/Experiment. "Comparison of Real and Class-made Flowers".
Level - Ages 5-7 Type - Group/Individual
Materials - a variety of materials such as: clay, play dough, construction paper, etc.; an assortment of real flowers.
Description - Have the class construct three-dimensional flowers out of an assortment of materials. Compare with the real flowers - by touch, smell, etc. Draw conclusions with the class.

32. Experiement. "Comparison of Live and Stuffed Animals".
Level - Ages 5-7 Type - Group
Materials - a live animal such as a cat, a guinea pig, a rabbit, etc.; a stuffed animal.
Description - After the class has become familiar with the live animal, place it on the floor in front of the class. Also, place the stuffed animal on the floor near the animal. Have the class watch the real animal for a while. Discuss with the class what the differences are between the living and the stuffed animal are. Draw conclusions with the class.

33. Experiment. "Comparison of Living and Non-Living Human Beings".
Level - Ages 5-7 Type - Group
Materials - a stethoscope, if possible; a mannekin.
Description - The teacher will aks for two volunteers in the class. Either with a stethoscope or your ear, have one child listen for a heartbeat on the other child. Now have him listen for one on the mannekin. Have two or more children volunteer and repeat this experiment. Draw conclusions with the class.

34. Field Trip. "Trip to a Greenhouse".
Level - Age 4 and up Type - Group
Description - Visit a greenhouse with the class. Observe and identify a variety of plants. Note how the plants are taken care of and that they need sun and water and, in some cases, certain tem peratures, to grow and live.

35. Experiment. "What Do Plants Need to Grow?"
Level - Ages 4-7 Type - Group
Materials - Four paper cups filled with soil, pumpkin seeds, two pictures of the sun, two pictures of a water container with water.
Description - With the class, plant pumpkin seeds in the four paper cups. Explain to the class that you are going to try and grow each plant differently from the other. One plant will be watered but will nave no light, another light but no water, another no water and no light, and the last will have water and light. Place the appropriate pictures on each plant, i.e. light but no water will have just a picture of the sun on it, etc. (Printed labels can be used with older children.) And place the plant in the appropriate environment. Continue the conditions of this experiment and record what happens. Discuss with the class the results.

36. Project. "Classroom Terrarium".
Level - Any level Type - Group
Materials - A terrarium kit or potting soil; a bottle; seeds; long sticks for placing seed in bottle.
Description - Give each child a responsibility in setting up the terrarium such as: putting soil in the bottle, planting the seeds, etc. After the terrarium has been planted, each child can assume part of the responsibility for taking care of it such as: watering the seeds, checking and reporting to the class if anything has grown, etc. A record or chart as to the plant's growth rate could be kept.

37. Project. "Growing Plants".
Level - Ages 4-7 Type - Individual
Materials - Paper cups filled with soil, pumpkin seeds, a water container.
Description - Have each child plant pumpkin seeds in paper cups with each child's name on his plant. Have them take care of their own plants each day. Observe plant growth and discuss and record each day. When plants are too big for the containers, have the children bring them home and replant outside, showing the proper process beforehand. Have children report on plant progress at home in class.

38. Classroom Activity. "How Do Fruits & Vegetables Grow?".
Level - Ages 4-8 Type - Group
Materials - Large teacher-made mural showing a soil line, a tree above the soil line with roots below, a vine off to one side of the mural, a sun and a cloud on the top of the mural, teacher-made fruits and vegetables, (printed labels for older children), masking tape.
Description - Have the children select a fruit or vegetable and place it with masking tape in its appropriate place on the mural. For example, carrots below the soil line, pumpkins above, apples on the tree, grapes on the vine, etc. With older children, the appropriate printed label can be placed next to the fruit or vegetable.

39. Creative Dramatics. "Pantomiming Plants".
Level - Ages 5-8 Type - Group
Materials - Empty watering can; pictures or drawing of the sun and moon; several separate pictures of flowers (printed labels for older children), pins.

39. (Continued)
Description - Choose children to be flowers, the moon, the sun and the gardener. Pin the appropriate pictures or labels on the children. Give the gardener the watering can. Have the children follow the teacher's storyline by pantomiming what she says.
Storyline - "The gardeners are planting the flower seeds in the ground. (flowers curled up on floor) this morning . . . . (lights on in room - sun stands with arms outspread). The gardener is watering the flower seeds so they'll grow . . . . (gardener waters flowers and slowly the flowers stand up and stretch their arms out) Now it is almost night and the gardener goes home to bed . . . . (gardener leaves). The sun is fading away and the moon is coming up . . . . (sun exits, moon enters, lights go off) The flowers are also sleepy . . . . (Flowers slowly sit down) Soon it's morning (sun enters, moon exits, flowers stand up, lights go on) The gardener is awake too, but he's late today. . . . (gardener enters) The flowers seem droopy (flowers droop) But, the gardener has his watering can filled with water with him . . . (gardener waters flowers, flowers stand up straight with outstretched arms) And so, the flowers will live and grow now."

40. Field Trip. "A Trip to the Supermarket".
Level - Ages 7-8 Type - Group
Description - Take the class on a fieldtrip to a local supermarket. This activity can be used in a great variety of ways: introduction of unit, culmination of unit, experience to stimulate expressive language or a more specific purpose such as purchasing one food in many forms, i.e. a potato.

41. Art. "Make Your Own Fruits and Vegetables".
Level - Age 5 and older Type - Individual
Materials - Clay or play dough; paint; brushes.
Description - Have the class make vegetable and fruit out of clay or play dough and paint if they like. Display around the classroom.

42. Project. "Vegetable and Fruit Checklist".
Level - Ages 7-9 Type - Individual
Materials - Teacher-made ditto with a checklist of pre-taught various fruits and vegetables.
Description - Have the children take the dittoed list home and mark off the vegetables and fruits they have at home.

43. Project. "Vegetable Soup".
Level - Age 5 and up Type - Group
Materials - A variety of vegetables, water (3/4 cup per student), salt, pepper, large pan, knife, hot plate, cups and spoons.
Description - Make vegetable soup with the class. Clean and cut vegetables having the class name each vegetable used.

44. Project. "Fruit Salad".
Level - Ages 5 and up Type - Group
Materials - a variety of fruit, a large bowl, wooden spoon, small bowls and spoons.
Description - Make a fruit salad with the class. Clean and cut fruit having the class name each fruit used.

45. Fieldtrip. "A Trip to the Zoo".
Level - Age 4 and up Type - Group
Description - Arrange a fieldtrip with the class to the zoo. Observe the various animals making note of their appearance, food they eat, environment, habits, etc. With the children, make up an experience chart in class.

46. Art. "Animal Puppets".
Level - Age 4 Type - Individual
Materials - paper bags, construction paper, crayons, glue.
Description - Have the class make paper bag puppets of animals using the above materials. Afterwards, the class can make up their own puppet show.

47. Art. "Make Your Own Animals".
Level - Ages 4-6 Type - Individual
Materials - A variety of materials such as: clay, playdough, felt, paper mache, eggshells, paints, brushes, picture of animals.
Description - Have children make animals out of any of the above materials or any other you can think of, referring to pictures to get idea of shape and color. Have the children paint their finished product if they like. Display animals around the classroom.

48. Art. "Animal Collage".
Level - Ages 5-8 Type - Group/Individual
Materials - Large chart paper; magazines; varnish; brush.
Description - Have the children cut pictures of various animals from magazines. Paste the pictures on cardboard and brush with varnish. With older children, the appropriate printed label can be placed next to each picture.

49. Art. "Make a Fish".
Level - Ages 5-7 Type - Individual
Materials - Newspaper; paste; scissors; paint; brushes.
Description - Give each child four 5" x 7" pieces of newspaper and some paste. Have children paste all four pieces of newspaper together. Now have each child draw an outline of a fish with a black crayon. The fish should be cut out immediately, crumpled a little to give it dimension, and left to dry. The results are similar to paper mache. The fish may be painted and hung in mobile-like fashion.

50. Race. "Animal Relay Race".
Level - Age 4 and over Type - Group
Description - Divide the group into teams. Explain to the children that they are to race, one at a time, from the starting line to the finish line and back. Each child then tags the next player on his team and they continue racing until all teams are finished. Have the first child race as kangaroos by hopping, the next child as apes or monkeys by stooping, the next child as crabs and crawling, etc.

51. Game. "What Animal Am I?".
Level - Ages 5-7 Type - Group
Description - Choose a child to think of an animal. Have him pantomime his choice for the class. The winner will then have a chance to think up an animal and the game continues.

52. Game. "Old Otto the Octopus".
Level - Ages 4-8 Type - Small Group
Materials - Two identical pictures or drawings of 20 animals, each glued on 3" x 5" pieces of cardboard with printed labels underneath such as: 'Harry the Horse', 'Martha, the Mouse', 'Stanley the Snail', etc.; one picture glued on 3" x 5" piece of cardboard labeled, 'Old Otto the Octopus'.
Description - This game is played exactly like Old Maid. The child with the single unmatched card left is 'Old Otto the Octopus'.

53. Game. "Animal Concentration".
Level - Ages 4-7 Type - Small Group
Materials - Two identical pictures or drawings of various animals each glued on 3" x 5" pieces of cardboard.
Description - Turn each card face down on the floor. Each child, in turn, turns two cards over. If they match, he keeps them; if they don't match, they are turned back over in the same place. The child with the most cards wins.

54. Game. "Love is Having a Classroom Rabbit".
Level - Ages 4-7 Type - Group
Materials - a rabbit (or a gerbil, etc.) preferably young so the children can observe growth; a cage; food and water; kitty litter or newspaper shreads.
Description - With the class, appropriate a complete program of total care for your classroom pet. Responsibilities such as feeding, cleaning the cage, charting growth, etc. can be shared.

55. Project. "Taking Care of Tadpoles".
Level - Ages 6-12 Type - Group
Materials - fishtank or aquarium; fish food.
Description - Buy tadpoles or find them yourself and carefully place in an aquarium full of water. Give each child a responsibility or take turns with feeding the tadpoles fish food, changing the water, recording growth, etc. When tadpoles start to develop legs, get bigger, lose their tails and finally become frogs, take a fieldtrip to a pond and turn them loose. This activity is excellent for children learning respect for life and growth and development.

56. Project. "Start An Aquarium".
Level - Ages 6 and up Type - Group
Materials - Aquarium or fishbowl; water ferns; marbles or stones for bottom of bowl; an assortment of tropical fish such as goldfish, black mollies, guppies, etc.; fishfood.
Description - Start an aquarium with the class. Each child can be given a responsibility or take turns with feeding, changing and cleaning the aquarium, charting growth or birth rate, or having everybody choose names for the fish.

57. Project. "Build a Birdhouse".
Level - Ages 7 and above Type - Group
Materials - One small cardboard box; straw; leaves; twigs; birdseed.
Description - With your class, make a birdhouse from heavy box cardboard. Paint it with shellac to make the house waterproof. Furnish it with pieces of straw, leaves, twigs, etc. and by drawing a picture of a bird on the inside. Place the birdhouse outside the window and have the

57. (Continued)
children observe their new neighbors. Teacher and children can write up their observations.

58. Art. "Animal Home Dioramas".
Level - Ages 6-9 Type - Individual
Materials - shoe box; clay; paint; crayons; paste; construction paper.
Description - Have each child create their own animal dioramas. The appropriate animal can be made out of clay and painted and placed inside its proper environment. Display the finished projects around the classroom and discuss.

59. Classroom Activity. "Where Do I Live?"
Level - Ages 6-9 Type - Group
Materials - large piece of tagboard divided in three with separate labels or pictures of "The Land", "The Air", "The Sea" placed over one column each; various pictures of animals of each category; masking tape.
Description - Have each child pick an animal at random, identify it and tape it to its appropriate environment. Children can search magazines for animals or draw their own animals and continue with this activity.

60. Game. "Animals and Their Homes Dominoes".
Level - Ages 5-7 Type - Small Group
Materials - teacher made 3" x 5" dominoes using animals and animal homes instead of dots.

61. Game. "Animal Homes Bingo".
Level - Ages 5-8 Type - Small Group
Materials - 8 1/2" x 11" sheets of construction paper; crayons; markers; teacher-made cards of 24 different animal homes.
Description - Have children divide their paper in 25 squares and, with the class, draw 24 different animals(1 free space) in each sqaure to resemble a Bingo card. Play like Bingo with the exception that the teacher will hold each card with an animal's home up. The child will then mark the correct Bingo animal until there is a winner.
Note - Be sure that the children draw their animals on any square they want. Otherwise everyone will get Bingo at the same time.

62. Game. "Animals and Their Homes Card Game".
Level - Ages 5-8 Type - Small Group
Materials - Deck of cards with animal and home pairs and one "joker".
Description - Play as game of Old Maid except goal is to match animal and its home as a pair. The child with the lone card at the end of the game is out. Initiate a tournament with a prize until there is one winner.

63. Game. "Go Fish for Animals and Their Homes".
Level - Ages 5-8 Type - Small Group
Materials - Teacher-made deck of animals and animal homes cards as pairs. (For example, write the word 'bird' on the top of the card and 'nest' on the bottom - its corresponding card should have the word 'nest' on the top of the card and 'bird' on the bottom), etc.
Description - This game is played exactly like 'Go Fish' with the exception of matching the proper animal to its home is counted as a pair. Pictures of animals with their corresponding home should be used with younger children.

64. Fieldtrip. "Visit to a Pet Shop".
Level - Ages 4-6 Type - Group
Description - Take the children to a pet shop to see some of the different animals. Help the children to associate pets in the store with pets the children might have in their own homes. In class, discuss some of the pet supplies one needs to care for certain kinds of pets.

65. Fieldtrip. "A Trip to the SPCA".
Level - Ages 5 and up Type - Group
Description - Take the class on a fieldtrip to the SMCA. Have children identify the various animals and observe the care given to each animal. Older children might like to become involved with various activities and projects the SPCA sponsors.

66. Storytelling. "My Pet".
Level - Age 5 and up Type - Individual
Description - Encourage child to relate to class their own story choosing one of the following suggested topics: "My Pet", "How I Would Care For A Pet", "I Wish I Had a Pet _____", etc. Older children can write their own theme and read to the class.

67. Project. "Pet Show".
Level - Ages 6-12 Type - Group
Description - Let the children have a pet show. Arrange with the children's mothers to bring in the pets or a picture of their pets. Each child can tell something about his or her pet with a question and answer period after each child is finished.

68. Classroom Activity. "Me - Now and Then Booklets".
Level - Ages 4-5 Type - Individual/Group
Materials - Photographs of each child in class as a baby and at the present time; construction paper; glue.
Description - Individually have the baby picture and present picture of the child placed side by side on construction paper folded into a booklet titled "Me Now and Then" with the child's name. Discuss differences in size, motor skills, abilities, etc. Finished booklets can be given as presents to each child's parents.

69. Classroom Activity. "Baby Animals and Their Mothers".
Level - Ages 4-6 Type - Group
Materials - various pictures, drawings or models each of different kinds of adult animals and separate appropriate baby animals.
Description - Place the adult mother animals on the chalkboard tray. Have the children take turns choosing a baby animal, identifying it and placing it next to its mother.

70. Art. "Baby - Mother Collage".
Level - Ages 4-7 Type - Individual/Group
Materials - Large sheet of tagboard; magazines; scissors; paste.
Description - Have each child find and cut out scenes or pictures demonstrating babies or mothers in various activities. Identify each animal and paste all the pictures on the tagboard to form a collage.

71. Art. "Sesame Seeds Exclusives".
Level - Ages 5 and over Type - Individual
Description - Working over newspaper, have each child make a design with paste on construction paper. Sprinkle sesame seeds on the paper. After a minute or so, shake off the excess seeds to uncover a sesame seed exclusive. Can also be used with one or a mixture of different small seeds.

72. Art. "Seed Jewelry".
Level - Age 5 and above Type - Individual
Materials - a variety of seeds such as acorns, chestnuts, beans, chick peas, etc; pipe cleaners. (The teacher should carefully pre-punch a hole in each of the seeds used with an ice pick).
Description - Have the children create jewelry from one type or all the types of seeds used by poking a pipe cleaner through the hole. Pipe cleaners can then be twisted to form rings, bracelets, cuff links, etc. Older children can use smaller seeds and a needle and thread for their creations.

73. Art. "Ecology Box".
Level - Age 10 and above Type - Individual
Materials - A variety of seeds such as beans, chick peas, acorns, sesame, etc.; 8 1/2" x 11" pieces of cardboard; popsicle sticks; 8 1/2" x 11" pieces of heavy plastic; glue; making tape; paint or varnish; brushes; thumbtacks.
Description - Have the children construct their own 'ecology boxes' using the above suggested materials. With popsicle sticks, divide cardboard into as many squares as you desire and also around the entire edge and glue sticks together for extra thickness and height. After glue has dried, paint or varnish the inside of the boxes and the sticks with one or many types of seed for each box and carefully fill the boxes. Next place the plastic over the top and seal with masking tape and thumbtacks aroung the edge. Paint or varnish the outside of the box so the masking tape doesn't show. This treasure will last indefinitely.

74. Project. "Raise Hatched Baby Chicks".
Level - Ages 4-10 Type - Group
Materials - fertile eggs, incubator (chicubator)
Description - Based on Science Unit, hatch two fertile eggs in incubator (chicubator) teaching the importance of handling, feeding, caring for animals. Record on chart paper the progress of your project. When chicks are born, and at the proper time, transfer to a classroom coop and continue total care.

75. Fieldtrip. "A Trip to a Poultry Farm".
Level - Ages 5-8 Type - Group
Description - Take the class on a fieldtrip to a poultry farm. Observe and identify roosters, hens, baby chicks, eggs, etc. as well as care and feeding and the collection of eggs. Afterwards, draw up an experience chart with the class.

76. Art. "Egg Shell Mosaic".
Level - Ages 5 and up Type - Individual
Materials - egg shells; glue; paint; brushes; construction paper; paper bag.

76. (Continued)
Description - Have the children bring into class eggshells they have saved over a period of time. Paint the eggshells, dry and crush inside a paper bag. Have the children create designs gluing the eggshells on the construction paper. The designs will have a mosaic-type effect and make a beautiful display.

77. Art. "My Family Tree".
Level - Age 8 and up Type - Individual
Materials - Poster paper; glue; snapshots.
Description - Have each child make a family tree using each individual child's infant picture, toddler picture, current picture and pictures of parents, grandparents, etc. Note likenesses on chart such as same color of hair, same height, same color of eyes, etc.

78. Game. "Blind Man's Bluff".
Level - Ages 4-6 Type - Group
Description - Blindfold one child and place him in a circle formed by the other children. The blindfolded child then picks a child and by feeling his facial features, hands, hair, etc. tries to determine who it is.

79. Art. "Funny Faces".
Level - Ages 4 to 8 Type - Individual
Materials - Large ovals or other shapes; small circles, diamonds, squares, ovals, rectangles, etc. precut from construction paper; paste; construction paper.
Description - Give each child a large shape for face. On the table place assorted smaller shapes. Have the children create funny faces using these shapes. Mount on construction paper and display.

80. Classroom Activity. "What's Missing?".
Level - Ages 5-6 Type - Group
Description - Draw a face on the chalkboard with the children reminding you of parts as you draw them on. Have a child close his eyes and another child erase a part and ask, "What's missing?". Child must say the correct label and then draws it on and game continues with two more children. The game can be adapted later on by using an entire figure and erasing arms, legs, etc.

81. Art. "Balloon Faces".
Level - Ages 6-8 Type - Individual
Materials - balloons of assorted sizes and shapes; acrylic paints; brushes; string.
Description - Give each child a blown-up balloon and have them identify and paint eyes, nose, mouth, etc. in natural or funny positions. Tie a string on the end and display around the classroom.

82. Classroom Activity. "Labeling Parts of a Doll".
Level - Ages 6-8 Type - Group
Materials - doll; small printed labels of parts of the body; masking tape.
Description - Have the children identify and label the parts of the doll's body by sticking the appropriate labels on its corresponding part.

83. Classroom Activity. "Season Wheel".
Level - Ages 4-8 Type - Group
Material - large tagboard circle divided into four equal parts and each part labeled with one name of the four seasons; magazine pictures; scissors; glue; tagboard arrow attached to middle of circle with a brass brad.
Description - Make a seasonal wheel with the above-suggested materials. Children can cut out seasonal activity picures and place in the appropriate section of the wheel. Choose a child to spin the completed wheel and have him recite a sentence about the season to which his arrow is pointing. Other language development activities can be used with the Seasonal Wheel provided as motivation.

84. Classroom Activity. "Weather Chart".
Level - Ages 7-12 Type - Group
Materials - Laminated chart divided into columns with separate labels such as: temperature, precipitation, cloud condition, etc.
Description - Have the children watch TV weather or read newspaper each day. In class fill in the weather chart with the class. This can become a daily part of the early morning activities. Other advanced headings such as barometric pressure, winds, fronts, etc. can be added for older children.

85. Art. "Seasonal Shadow Boxes".
Level - Age 7 and over Type - Individual
Materials - shoe boxes; clothespins; pipe cleaners; a variety of art supplies.
Description - Let each child design and make a seasonal shadow box. The background should depict the season and with clothespins or pipecleaners, people involved in games or activities, etc. The figures should be dressed appropriately for the chosen season.

86. Art. "Seasonal Collage".
Level - Ages 6-10 Type - Group
Materials - large poster paper, magazines, scissors, paste.
Description - Have children identify and cut out pictures of various seasonal activities such as swimming, skiing, tennis, baseball, etc. Paste on large poster paper to form a seasonal collage. Specific themes for collages such as "Rainy Day Fun" or "Fun in the Snow", etc. with appropriate activities can be developed.

87. Roleplay. "Seasonal Sk[illegible]".
Level - Ages 8-14 Type - Group
Materials - Teacher-made folded slips of paper with different seasonal activities written on them such as; a small boy walking through the snow, a child floating on a raft, a tennis player, etc.
Description - Have a child choose a folded slip of paper and pantomime the activity written on it. The rest of the class will then try and guess what season it is and/or what activity is being acted out. After this activity has been introduced, the children can make up their own situations.

88. Classroom Activity. "Transportation Folder".
Level - Ages 4-6 Type - Individual
Materials - Manila folder containing about ten different pictures of each transportation vehicle.

88. (Continued)
Description - Present the child with the folder containing the pictures. Ask the child to sort through them and remove only the pictures of one transportation vehicle at a time that you ask for. All other pictures are to remain in the folder.

89. Fieldtrip. "A Trip to the Airport".
Level - Ages 4-8 Type - Group
Description - Visit an airport, bus station, train terminal or any other area of transportation interest and have the students observe and name the different vehicles they see. Afterward, draw up an experience chart with the class. Paper hats of the drivers of the vehicle can be made with younger children. Videotape all trips if possible for further use.

90. Art. "Home-Made Trucks".
Level - Ages 4-10 Type - Individual
Materials - a variety of art materials such as clay, paper, print, cardboard, wood, blocks, boxes.
Description - Have children construct and design their own trucks out of any art materials available. Other types of vehicles can also be used.

91. Art Project. "The Classroom Express".
Level - Ages 4 and over Type - Group
Materials - discarded refrigerator cartons, etc. or any large boxes available and a variety of art supplies such as paint, paper, crayons, material (for curtains), tin foil (for chrome), etc., scissors.
Description - Have the class work together on a giant train. Be sure to have an engine, coal cars, caboose, etc. and as many other cars as desired. Train is not only a fun supplement for a transportation unit but also provides an ideal play area for children.

92. Art. "Transportation Booklets".
Level - Ages 6-8 Type - Individual
Materials - Scissors; paste; crayons; magazines; paper.
Description - Have children cut out pictures of different modes of transportation. Have them paste the pictures on paper, label and then mount into a scrapbook under appropriate headings such as: trucks, cars, boats, etc.

93. Demonstration/Art. "Table Setting Placemats".
Level - Ages 4 and over Type - Individual
Materials - paper plate; cup; napkin; plastic fork, knife, spoon; construction paper; crayons.
Description - With the child's help in identifying the objects and utensils needed, demonstrate the table setting for one person, using these materials. After the demonstration, have the children draw on construction paper the proper place setting using the correct materials needed, i.e., draw a round dish, a napkin with a fork on top to the right of the dish, etc. The finished placemats can be stored and used at snack time.
Note - This activity can be modified for younger children by having them paste pre-cut utensils and objects on their placemat rather than draw them.

94. Game. "Tool Clue".
Level - Ages 5-8 Type - Group
Materials - plastic tools or pictures of common tools such as; hammer, saw, plane, ax, screw driver, vice, wrench, etc.
Description - Display pictures or tools on the chalkboard tray. The child chosen to start the game will give the class a clue such as, "I'm thinking of a tool used for pounding in nails", or "I'm thinking of a tool used to chop wood", etc. The child with the correct answer must also pick the correct tool to become the winner. The winner will then think of the next 'tool clue'.

95. Roleplay. "What Tool Am I?"
Level - Ages 5-8 Type - Group
Materials - Several teacher-made cards with pictures of a specific tool on each card.
Description - Choose a child to start this activity by picking up a card from the pile. Have him pantomime the tool he picked for the class. The child who guesses the correct tool will then have a turn.

96. Fieldtrip. "A Trip to a Construction Site".
Level - Ages 5-10 Type - Group
Description - Take the class to a construction site and observe the various tools used. Note what tool is used for what job. In class discuss the trip in detail and work with the children on various follow-up activities such as writing themes, drawing pictures, experience charts, etc.

97. Experiment. "Machine People".
Level - Ages 4-6 Type - Small Group/ Large Group
Materials - a small supply of sand or sawdust; paper bag.
Description - Spread a thin layer of sand or sawdust over the top of a table. Walk over to the table with an armload of materials. Ask a few of the children if they would clear off the table for you and into the paper bag because your hands are full. Tell them it's all right to use their hands. Observe with the rest of the class how they do this. After the job is done, ask the class what different hand movements the children used such as: scooping, pushing, sliding, shoving, picking up, etc. Relate to various machines and their functions.

98. Pantomime. "Relating Body Parts to Machines".
Level - Ages 5-8 Type - Group
Materials - pictures or drawings of common machines such as a bulldozer, a crane, a steamshovel, a cement mixer, etc.
Description - Assign each child a picture and have him pantomime that machine. In turn, have the class relate aloud what parts of the machine resemble or are similar in form or in function to the parts of the human body.

99. Roleplay. "What Machine am I?"
Level - Ages 5-8 Type - Group
Description - Choose a child to think of a machine. In turn, each child will pantomime what his machine is. The class will then try and guess what machine the child is imitating.

100. Experiment. "Marshmallow Forms".
Level - Ages 5-10 Type - Individual/Group
Materials - Three marshmallows per student.
Description - Have the children make a flat circle, a flat square and a flat triangle out of each marshmallow. After each child has made their shapes, have them tell you what hand movements they used. Relate to various functions of machines. Afterwards, have the children eat their work.

101. Classroom Activity. "Pick the Fruit".
Level - Ages 3-5 Type - Individual
Materials - a cookie sheet with an outline of a tree pasted on the inside of the pan; small magnetic fruit.
Description - Have the children take turns putting fruit on the tree and taking it off.

102. Experiment. "What Attracts a Magnet".
Level - Ages 5-8 Type - Group
Materials - Magnet; a variety of objects - some that will attract the magnet and some which will not; 2 boxes - one for objects attracted by magnet, one for objects not attracted by magnets, appropriately labeled.
Description - Place magnetic and non-magnetic objects around the room. Have children take turns holding the magnet and selecting an article that they think may be magnetic. If the object selected is attracted to the magnet, the child places it in the appropriate box; if it is not attracted, it is put in the other box.

103. Experiment. "Magnets Make Work Easy".
Level - Ages 6-10 Type - Group
Materials - 2 boxes; magnet; bottle caps; a variety of non-metallic objects.
Description - In one box mix all objects with the bottlecaps. Choose a child and ask him to sort out the bottlecaps and put them in the other box. After the job is complete, ask the children if there is no easier and faster way to do this job. Present another child with a magnet and remix all objects in the box. Ask him to repeat the task again - only this time with the magnet. Afterwards, make a list with the class of different tasks they can think of using magnets to make the work easier.

104. Experiment. "Magnet Bulletin Board".
Level - Ages 8-12 Type - Group/Individual
Materials - tagboard; marker.
Description - Make a display board divided into thirds with the following headings: "Things Magnets Will Attract", "Things Magnets Will Not Attract" and "Things that Magnetism will Go Through". Have the children experiment at home with these different objects and with a magnet and fill in specific objects in their proper column. When chart is full, discuss with children the objects and their method of experimentation, etc.

105. Classroom Activity. "Appliance Chart".
Level - Ages 5-8 Type - Group
Materials - pictures or drawings of common and basic appliances such as a stove, a refrigerator, a washing machine, etc.; plaste; tagboard divided into three sections labeled: "Appliances We Need to Clean With",

105. (Continued)
"Appliances We Use For Cooking and Eating" and "Appliances We Use For Enjoyment".
Description - Have each child pick a picture at random. Have him identify it and tell what the appliance is used for. Have him then paste the object in the correct section.

106. Roleplay. "Appliance Guessing Game".
Level - Ages 6-9 Type - Group
Materials - cards with words or pictures of basic appliances such as: refrigerator, stove, washing machine, etc.
Description - Line up cards on chalktray and choose one child to pantomime how one of those appliances is used. The child who picks out the correct appliance that is being dramatized has the next turn.

107. Art. "Appliance Booklets".
Level - Ages 6-9 Type - Individual
Materials - magazines; scissors; paper; paste.
Description - Have children search magazines for appliances. Have them cut out and paste these pictures on paper to form booklets.

108. Fieldtrip. "A Trip Around the Neighborhood".
Level - Ages 4 and up Type - Group
Description - Take the class on a fieldtrip around the neighborhood and school. Have them correctly identify the different types of buildings you see. In class, discuss what buildings and places you've seen and what these buildings are used for.

109. Art. "My Home".
Level - Ages 4-6 Type - Individual
Materials - paints; brushes; paper; crayons.
Description - Have each child paint or draw a picture of his home. When pictures are completed, have each child show his or her picture to the class. Display in the hall for everyone to see.

110. Project. "The Model Neighborhood".
Level - Ages 8-12 Type - Small Group
Materials - a variety of materials such as: clay, blocks, sticks, stones, etc.; or paint and a long roll of paper.
Description - Divide the class into small groups. Have them plan, develop and build or paint a group mural of a miniature model neighborhood including a school, stores, a church, houses and other buildings found in a community. Display for parents, teachers and other classes to see.

111. Guest Speaker. "Visit from A Contractor".
Level - Ages 5 and up Type - Group
Description - Invite a contractor to speak to the class about the construction of buildings and what materials are needed for construction. Have a question and answer period at the end of his talk.

112. Project. "Classroom Construction Workers".
Level - Ages 7-10 Type - Small Group
Materials - clay or play dough; any type of square containers (2" x 2" x 2" deep) to be used as a mold.

112. (Continued)
Description - Divide the class into small groups. Give each group some clay or play dough and a mold. Have each group construct any type of building they want using the 2" clay squares made from the mold as a builder would use bricks. Display the finished products.

113. Sandplay. "Road Team".
Level - Ages 4-8 Type - Small Group
Materials - sand box, sand, shovels, pieces of wood, blocks.
Description - Have children create roadways, expressways, bridges, and other man-made objects in sand.

114. Field Trip. "Camera Trip".
Level - Ages 5 and up Type - Group
Materials - a camera with plenty of film.
Description - Take the class on a field trip around the city. Observe and take pictures of any man-made structure such as a bridge, streets, etc. along with pictures of trees, flowers, etc. In class, have the children sort out the man-made objects from the rest. Pictures can also be used to reinforce events that took place on your trip.

115. Art. "Wheel Collages".
Level - Ages 4-8 Type - Group/Individual
Materials - Construction paper cut in the shape of a wheel; scissors; paste; old magazines.
Description - Spread magazines on the table and allow the children to go through them with the idea of finding as many wheels as they can. Have children cut out each wheel and paste onto a piece of paper forming a collage.

116. Field Trip. "Where The Wheels Are".
Level - Ages 5 and up Type - Group
Description - Take the class on a fieldtrip to an air terminal, railroad yard, factory, etc. or anywhere wheels in different sizes and functions can be found. Discuss in class and make up an experience chart.

117. Field Trip. "Wheely Walk".
Level - Ages 5-9 Type - Group
Description - Have the children locate wheels in the classroom and keep a record by drawing pictures on a chart or writing down the names. Continue during the day outside the classroom, at lunch, in gym, on the playground, in art, in library and in the halls.

118. Research. "Wheels, Wheels, Wheels".
Level - Age 6 and up Type - Individual/Group
Description - Bring the children to the Library and allow them to search through as many books (mainly picture books) as possible, looking for pictures of wheels in any form(s). Place a marker in these books and when all research is over, allow each child to show and explain his findings.

119. Art. "Wheeler Dealer Designs".
Level - Ages 6-9 Type - Individual
Materials - Cardboard boxes; short dowels; screw-on bottle caps; pop-on can tops; heavy-duty glue.

119. (Continued)
Description - Have children use the materials to form any wheeled vehicle they imagine. Have each child display his or her vehicle to the class and tell what it is.

120. Classroom Activity. "Why We Need Wheels".
Level - Ages 7-10 Type - Group
Descriptions - With the class, list as many things as you can think of that require wheels. Think about and discuss how their lives would be different if there were no wheels.

APPENDIX A-4

RELATED ACTIVITIES - THE SOCIAL ENVIRONMENT

1. Art. "Life Size Self Portraits".
   Level - Ages 4-6 Type - Individual
   Materials - sheets of paper cut into 4 1/2" x 2 1/2" pieces; poster paints; brushes; pencils; scissors; mirror (full length if possible).
   Description - Have each child lie face up on a sheet of paper while another child traces his entire body with a pencil on that paper. Each child will then cut out his or her form and paint what he or she looks like. If needed, the child can use the mirror. When all the children have completed their pictures, display them around the room.

2. Classroom Activity. "Group/Self Identification".
   Level - Ages 4-6 Type - Group
   Materials - pictures of people and families cut out of magazines; children's photographs and photographs of their families.
   Description - Have children being in photographs of themselves and of their family. Mix all children's photographs with the pictures you cut from magazines. Then have each child find and identify his picture and each member of his family. This activity can be modified for younger children by mixing his picture along with magazine pictures or by just mixing all of the children in the class's pictures together and having the child identify the appropriate photo of himself.

3. Fieldtrip.
   Level - Age 6 Type - Group
   Description - Take the class on a field trip to a fire-house; police station; grocery store or bakery etc. Afterwards have a class discussion on what the class saw; who did they meet; what did these people do; would they like to do this type of work when they are older; etc.
   Videotape if possible for further reference.

4. Role Play. "What's My Occupation?".
   Level - Ages 5-7 Type - Group
   Materials - paper bag filled with names of different occupations printed on folded pieces of paper.
   Description - Have a child pick one name from the bag and give the class clues as to the occupation he has chosen. (i.e., "I wear a blue uniform and badge, and I keep people safe." - answer - Policeman.) The class will then try and guess what the occupation is. This activity can be modified for younger children by having the teacher whisper an occupation in the child's ear rather than have him pick a name from the bag.

5. Role Play. "Who Am I?".
   Level - Ages 7 and over Type - Group
   Description - Have children think about and plan how to show the class what they want to be. Each child will then pantomime their choice for the class and have the class guess who they are pretending to be. Good choices are: baker; teacher; policeman; doctor; electrician; telephone repairman; etc.

6. Game. "Occupation Concentration".
   Level - Ages 4-8 Type - Individual or Small Group
   Materials - 3" cardboard squares with a picture or drawing of objects associated with different person's occupations and pictures or drawings of the corresponding person on each square. Example - fireman, hat and hose; teacher, blackboard and books; construction worker, hardhat and drill; etc.

6. (Continued)
Description - Place cards face down in rows on the floor. Each child will have a turn to lift two cards. If he makes a match (i.e., hardhat and drill to construction worker, etc.) he keeps those cards. Game ends when all cards are off the floor. The child with the most cards at the end of the game is the winner.

7. Classroom Activity. "Sharing Box".
Level - Ages 4 and over Type - Group
Materials - a good size box (Can be decorated by class).
Description - Have children bring toys or favorite games to school and then show the class what they have brought. After discussion, have the child place the object in the "sharing box". During free time, the object can be enjoyed and shared by several children.

8. Demonstration. "Baking Bread".
Level - Ages 4-5 and over Type - Group
Materials - hot roll mix; shortening; pan.
Description - Following the directions on the bread mix box, bake the bread with the class by assigning each child a job such as: greasing the pan; adding water to the mix; kneading the dough; etc. With older children a simple bread recipe can be used.

9. Demonstration. "Making Peanutbutter".
Level - Ages 4 and over Type - Group
Materials - blender; shelled peanuts; oil; jelly; bread.
Description - Place peanuts in blender and pulverize. Oil may need to be added to make a peanutbutter consistency. Make peanutbutter and jelly sandwiches. Each child should be given one job such as: putting peanuts in, turning on blender, etc.

10. Game. Potato Race (Three-Legged Race).
Level - Ages 7-9 Type - Group
Materials - potato sacks or old pillow cases.
Description - Divide the class into teams of two children each and give each team a sack. Have one child of each team put his right leg and the other child put his left leg in the sack. Have the teams "hop" toward a predetermined goal or finish line. This activity can be modified by lengthening the distance or having an obstacle course, such as curves, etc.

11. Game. "A Funny Thing Happened To Me".
Level - Age 5 and up Type - Group
Description - With the class sitting in a circle, the teacher begins with, "A Funny Thing Happened to Me". She then relates something humorous that really happened to her. She then asks for a volunteer to relate to the class some humorous story that happened to him. Have the children take turns for as long as time permits. After each story discussions could be held as to why the children or why the child found his situation humorous.

12. Game. "Manfred the Mindreader".
Level - Ages 7-10 Type - Group
Materials - Answers only to funny questions individually sealed in envelopes.

12. (Continued)
Description - Telling the class that she will now become 'Manfred, the Mindreader', the teacher will hold one envelope at a time to her head and give a pre-determined answer (pretending to be able to mindread the answer to the question). She will then open the envelope and read the correct, inconsistent question. The children can plan in small groups their own show scheduled for a later date.

13. Music. "Musican Instruments ID".
Level - Ages 5-9 Type - Group
Materials - pictures or drawings of musical instruments; records or tapes of what each instrument sound like; record player or tape deck.
Description - Show the class a picture of a musical instrument and have them describe it to you. Explain how it is used and play the corresponding musical sound. After each instrument has been identified, play a record that utilizes all of the instruments mentioned. For reinforcement and review with younger children - Line up all the pictures on the blackboard and play a guessing game. Play a recording of a solo instrument and have the child point to the picture or name the correct instrument. For reinforcement and review with older children - Play a record which utilizes many instruments. Have them name or list as many instruments that they hear.

14. Music. Fieldtrip.
Level - Ages 4-9 Type - Group
Pre-teaching - familiarity with musical instruments.
Description - Take the class on a field trip to a music store. Identify and label each instrument. Afterwards lead a group discussion on the trip asking what the child saw and what he liked, etc. For reinforcement and review, a vocabulary list of music and musical instruments can be made or drawings or magazine pictures of various instruments for a bulletin board display.

15. Music. "Instrumentally Yours".
Level - Ages 3-5 Type - Group
Pre-teaching - Some knowledge of musical instruments.
Description - Have each child choose his favorite musical instrument and imitate it as best as he could. Choose a familiar song such as "Old MacDonald" and have the class "play the song".

16. Music. "Music Break".
Level - Ages 4-8 Type - Group
Materials - record player; records.
Description - Set aside a few minutes each day for a "music break". At that time, the child who's turn it is that day, will play his favorite record that he brought in or lead the class in his favorite familiar song. The teacher can have a turn too.

17. Music. "Kazoo ZOO".
Level - Ages 5-7 Type - Group
Materials - kazoos, records and record player.
Description - Have the children purchase a kazoo (from a five and dime store) and bring to class. Have them play along with their favorite records.

18. Music. "The Home-made, Back-porch, Kitchen Skillet, Psychedelic, Classroom Band".
Level - Ages 5-7 Type - Group
Materials - Junk found anywhere with a musical quality such as: washboards and sticks, old metal pot covers, wooden spoons, combs and tissue paper, closed containers with stones or sand, etc.
Description - Have children bring in junk such as the above to class. After each child has shown the class what he has brought in and what it sound like, lead them in a familiar song and have them join in playing their instruments. If the teacher is really ambitious and the class is somewhat proficient, she could arrange and conduct a familiar song and cue the children by pointing when it's their turn or turns in a song. The children might want to decorate their instruments and make uniforms for performances later on.

19. Music/Art. "Musical Art".
Level - Ages 4-7 Type - Group
Materials - Record player and an assortment of records such as a waltz, polka, rhapsody, lullaby, rhumba, etc., and any type of art materials and paper available for students.
Description - Experiment for a week or so during the period of time set aside for art activities. Have the children draw, color or paint anything they feel like on a piece of paper while you play a record in the background. Play only one kind of record a day. Group and display the pictures around the room each day with the type of music played that day. At the end of the week have the children tell you what picture(s) they liked best and why, and what kind of music they liked best and why. Note similarities, differences and patterns.

APPENDIX B - RELATED MATERIALS

B-1 Related Materials - Symbolic Representation
B-2 Related Materials - Cognitive Processes
B-3 Related Materials - The Physical Environment
B-4 Related Materials - The Social Environment

APPENDIX B-1

RELATED MATERIALS - SYMBOLIC REPRESENTATION

1. Film. "Alphabet Conspiracy - Pts. 1 and 2".
   Level - Ages 4-7 (American Telephone and Telegraph)
   Color 53 minutes 16mm film optical sound (1959)
   Description - An animated plot to destroy the alphabet and all language depicts the science of linguistics (from the Bell System Science Series).

2. Instructional Material. "Play Desk".
   Level - Ages 4-7 (Fisher-Price Co.)
   Cost - $5.99
   Description - Plastic letters and numbers fit into special places on this desk, for easy sorting and labelling.

3. Filmstrip Set. "Project Life - Perceptual Thinking Activities - Level 2, Set 4, No. 15".
   Level - Ages 5-7 (General Electric)
   Cost - $7.00 per filmstrip.
   Description - 36 frames with a series of 4 items per frame are presented. Within each frame one item does not fit. Items are letters and numbers only. Can also be used for grouping and sorting activities.

4. Instructional Material. "Jumbo Alphabet".
   Level - Ages 3-6 (Ideal School Supply Co.)
   Description - Large letters imbedded in 12" rubber frames. The package contains 4 set frames containing capital letters. Some of the letters are side by side so when removed a large area is open not leaving any clues for the child to insert the letters. The material is flexible and washable. Can also be used for learning the alphabet as well as other letter and alphabet activities.

5. Instructional Material. "Rubber Stamp Alphabet".
   Level - Ages 4-6 (Lakeshore Equipment Co.)
   Cost - $5.00 (lower case), $6.50 (upper case)
   Description - Rubber stamp letters mounted on wooden handles 3/4" high and appropriately labelled for easy identification. Useful for making alphabet games, charts, and individual activities.

6. Instructional Material. "DLM Alphabet Cards".
   Level - Ages 6-10 (Developmental Learning Materials)
   Description - Contains 3 sets of cards (printed, manuscript, cursive) containing upper and lower case letters. Useful for a variety of matching activities and the different sets can be used with a wide age range.

7. Kit. "Fun With Capital and Lower Case Letters".
   Level - Ages 4-6 (Instructo)
   Cost - $5.95
   Description - This kit contains a wide range of alphabet activities, which are carefully sequenced. It includes a special reference chart, self-checking puzzles, self-correcting letter matching wheels and related worksheets.

8. Instructional Material. "Alphabet Bingo".
   Level - Ages 5-7 (Lakeshore Equipment Co.)
   Cost - $3.95
   Description - This is a bingo game that combines upper and lower case letters. It is excellent for familiarization and matching of both letter cases.

9. Instructional Material. "Romper Room - 4 Way Play Chest".
Level - Ages 5-7 (Special Education Materials, Inc.)
Cost - $9.00
Description - This chest has 4 sides: a felt board which will hold felt letters; a peg board with pegs; a magnetic board with magnetic letters: and a chalkboard with chalk and eraser. Can be used for distinguishing upper and lower case letters, recognition of letters, and many more letter activities.

10. Instructional Material. "Magnetic Lower Case and Upper Case Letters".
Level - Ages 5-7 (Instructo)
Cost - $8.95
Description - Plastic magnetic letters can be used for a variety of letter and alphabet activities as well as recognition and familiarization of both cases of letters.

11. Book. "The Adventures of Egbert the Easter Egg".
Author - Armour, Richard
Level - Ages 5-8 (McGraw-Hill Book Co.) (1965)
Cost - $3.95
Description - "The Adventures of Egbert the Easter Egg" uses many words with the 'e' sound in an amusing story for primary aged children. Good for introducing letter sounds and verbal and printed letter activities.

12. Instructional Material. "Giant Alphabet Poster Cards".
Level - Ages 6-8 (Milton Bradley)
Cost - $4.00
Description - These are extra large, easy to identify poster cards, each with a printed letter. Excellent for all letter and alphabet teacher-led activities.

13. Instructional Material. "Tachistoscope".
Level - Ages 6-12 (Educational Development Laboratories)
Cost - Under $10.00
Description - This is a machine through which letters, numbers, words, etc. can be flashed on a screen for exact second intervals. Excellent for visual perception and memory and a variety of letter and alphabet activities.

14. Flashcards. "Teach Me Alphabet Letters".
Level - Ages 5-7 (Renewal Products Company)
Cost - $1.00
Description - Alphabet flashcards consist of two sets of 26 cards each of upper and lower case letters. The small letter cards have a picture on them as well as the letter.

15. Instructional Material. "Alphabet Puzzle Board".
Level - Ages 5-8 (Milton Bradley)
Cost - $10.00
Description - This set contains 26 2" x 2" x 3/8" blocks in a wooden tray, which also contains each letter of the alphabet. Blocks are clear and have a laquered finish.

16. Flashcards. "ABC Picture Flashcards".
Level - Ages 4-8 (Ed U-Cards)
Cost - $1.00
Description - Contains 2 sets of picture and alphabet cards. One set of

16. (Cont'd) cards has a bright and colorful picture on one side and the capital letter on the opposite side. The other set has the identical picture as the first set plus the small letter on one side and the whole word printed on the opposite side.

17. Instructional Material. "Learn the Alphabet".
Level - Ages 5-8 (Milton Bradley)
Cost - $2.50
Description - Contains large white cards with full color illustrations of familiar objects, upper and lower case manuscript letters, and word lists with initial vowels and consonants. Directions for games and exercises to teach object and letter recognition as well as upper and lower case letters, alphabetical order, and spelling are included.

18. Instructional Material. "Vowel Wheels".
Level - Ages 6-8 (Milton Bradley)
Cost - $3.00
Description - This is a drill device which provides practice in blending sounds, word perception, and sound-symbol relationships. Each vowel is presented as an isolated sound in word settings. The reverse side of card is the vowel-consonant combinations. Discs are moved to form meaningful words.

19. Book. "The Cat in the Hat Beginner Book Dictionary".
Author - Eastman, P.D. and Geisel, T.S.
Level - Ages 7-10 (Random House)
Cost - $3.95
Description - A colorful and amusing child's dictionary that encourages reading and beginning dictionary skills. Has words, sentences and pictures.

20. Book. "Charlie Brown Picture Dictionary".
Author - Shultz, Charles M.
Level - Ages 8-10 (World Publishing Co.)
Cost - $6.95
Description - Charlie Brown and his gang star in this colorfully illustrated and labelled beginners' dictionary.

21. Filmstrip Set. "Aud-X Readiness Set (AXR-3)".
Level - Ages 4-6 (C. F. McCabe, Inc., Educational Systems)
Cost - $226.00 - full set.
Description - The 29 lessons help the child to learn to look, listen and respond to sight-sound instructions of the Aud-X and prepare the children for three modes of skill and concept instruction (words, story, word study). Builds the concept that words are sequences of letters which represent objects or ideas and introduce functions and names of the letters in the alphabet.

22. Flashcards. "Letter Recognition Game".
Level - Ages 4-7 (Mead School Products)
Cost - $1.25
Description - These are colorful flashcards containing the letters of the alphabet with a picture and word label corresponding to that letter. The letters themselves are removable with self-correcting cut-outs.

23. Instructional Material. "Match-Ums".
Level - Ages 4-7 (H-G Toys)
Description - Contains cards with letters that fit in puzzle fashion to cards with corresponding picture and word for that letter.

24. Flashcards. "Little Picture Cards".
Level - Ages 4-7 (Scott, Foresman)
Cost - $2.00
Description - Contains small cards with a colorful picture on one side as its appropriate initial letter on the other side.

25. Chart. "Here We Go From A to Z".
Level - Ages 4-12 (Rapp Studios, Inc.)
Cost - $1.00
Description - A colorful alphabet wall chart containing one word and picture for each letter of the alphabet.

26. Book. "The Animal ABC's".
Author - Walley, Dean
Level - Ages 4-7 (Hallmark Publishing Co.) (1970)
Cost - $3.50
Description - This is a beautifully illustrated book on animals and the alpnabet. It has moving paper mechanics and a rhyming text.

27. Instructional Material. "Link Letters".
Level - Ages 5-7 (Milton Bradley)
Cost - $1.50
Description - This is a box of one-inch letters which can be linked together in alphabetical order.

28. Book. "Curious George Learns the Alphabet".
Level - Ages 5-8 (Houghton-Mifflin Co.) (1963)
Cost - $3.95
Description - Curious George, the monkey, makes learning the alphabet into a game in this colorfully illustrated book.

29. Book. "Brian Wildsmith's ABC".
Author - Wildsmith, Brian
Level - Ages 5-8 (Watts) (1963)
Cost - $3.95
Description - This is a colorfully illustrated alphabet book which can be used not only for learning the alphabet but also for a variety of separate letter activities.

30. Instructional Material. "Jumbo Letters and Numbers".
Level - Ages 4-6 (Novo Educational Toy Co.)
Cost - $7.50
Description - Set consists of 3 1/4" upper and lower case letters and the numbers 1-10 in rubber frames which can be used for tracing, manipulation and recognition.

31. Filmstrip Set. "Project Life - Perceptual Thinking Activities - Level 2, Set 3, No. 4".
Level - Ages 4-6 (General Electric)
Cost - $7.00 per filmstrip
Description - Each filmstrip contains 40 frames with suggested letter figures presented with 2 or 3 possible completed figures below it. The child must selected the completed figure which corresponds best with the suggested letter figure.

32. Kit. "The Alphabet House".
Level - Ages 4-7 (Follett)
Description - This kit provides enrichment activities and a unique method of introducing letter recognition and formation in the alphabet house. Contains a teacher's guide, student activity book, alphabet story book, creative writing games and alphabet cards.

33. Instructional Material. "Groovy Letters".
Level - Ages 4-7 (Ideal School Supply Company)
Description - Children may practice forming the letters while staying inside the assigned grooves.

34. Instructional Material. "Write-on, Wipe-off Alphabet Fish".
Level - Ages 4-8 (R.H. Stone)
Cost - set of 28 write-on fish and 6 18" poles and magnet bait - $17.00
Description - Six-inch fish have steel eyes to attract a magnet and may be written on and wiped clean. May be used to teach formation of letters as well as letter names, easy words, numerals, matching shapes, and colors.

35. Instructional Material. "Alphabet Puzzle Cards".
Level - Ages 6-8 (Milton Bradley Co.)
Cost - $1.25
Description - This set contains 35 cards which can be put together to form complete letters of the alphabet. Only matching halves can fit together.

36. Instructional Material. "Touch Teaching Aids".
Level - Ages 4-6 (Childcraft Educational Corp.)
Cost - set of capital and lower case letters - $11.00
Description - Sturdy alphabet cards with letters with a raised surface for easier tactile recognition. Also designed to promote reading readiness.

37. Instructional Material. "Touch Beaded Alphabet Chart".
Level - Ages 4-6 (Lakeshore Equipment Co.)
Cost - $9.95
Description - 43 x 14" alphabet board has raised beaded letters in upper and lower cases. Useful for kinesthetic recognition of letters.

38. Instructional Material. "Mor-pla Kinesthetic Alphabet and Teacher's Guide".
Level - Ages 4-6 (R. H. Stone)
Cost - set of 26 upper and lower case letters - $31.00
Description - This alphabet is made of wood, 4 inches high, 1/2 inch thick. Rich in manipulative appeal and good for the tactile-oriented learner.

39. Instructional Material. "Kinesthetic Learning Alphabet".
Level - Ages 4-6 (Beckley-Candy)
Cost - $6.75
Description - This is a set of washable, brightly colored plastic letters. Starting points and sequence of strokes provides kinesthetic learning.

40. Instructional Material. "Unifix Interlocking Plastic Cubes and Number Indicators".
Level - Ages 3-5 (Philograph Publications Ltd.)
Description - Plastic cubes and plastic piece with numeral on top, interlock for self-correcting, recognition and matching of numerals and numbers activities.

41. Instructional Material. "Giant Dominoes".
Level - Ages 4-7 (Lauri Enterprises)
Cost - $9.90/set.
Description - 28 2 3/4" x 5 1/2" x 3/4" wood dominoes are in a complete set. Excellent for recognition of numbers.

42. Instructional Material. "Craydon Number Box".
Level - Ages 5-7 (Equipment Co.)
Cost - $2.50
Description - 11 1/2" x 7" x 1" sorting box has 10 compartments with numerals printed on the walls and 3 picture cards for each numeral for matching exercises.

43. Instructional Material. "The 100 Number Board".
Level - Ages 6-8 (Invicta)
Cost - $5.80
Description - Marked grid board holds 100 plastic tablets marked 1 to 100. Also included are 25 plain colored tablets. Can be used for counting exercises up to 100.

44. Book. "A Number of Bears".
Author - Walley, Dean
Level - Ages 4-7 (Hallmark's Children's Editions) (1970)
Cost - $3.50
Description - This is a beautifully illustrated and colorful book. It has moving parts and pop-out pages. Numbers 1-10 are illustrated via a family of bears.

45. Instructional Material. "Bingo Game".
Level - Ages 4-8 (Hammett)
Cost - $1.00
Description - This is a bingo game with special peg spinner and wooden markers and pegs.

46. Poster Cards. "Beginner's Number Poster Cards".
Level - Ages 5-7 (Milton Bradley)
Cost - $4.00
Description - Large, 11 1/4" x 4", easy to see, poster cards with 1 number per card offer a variety of number exercises and activities for the children.

47. Kit. "We Learn to Count".
Level - Ages 4-8 (Instructo Products Co.)
Cost - $6.50
Description - This kit provides picture cards with removable counters for the numbers 1 to 10 and interlocking printed numerals which are attached to the picture cards. Also included are 2 sets of counting strips, a ten frame, and a 100 square board.

48. Workbook. "Count and Color".
Level - Ages 5-7 (Kenworthy Educational Service)
Cost - $1.25
Description - This is designed to aid in teaching beginning number concepts, matching verbal labels with printed labels, and matching the number 4 and the word four. Also contains large illustrations to color.

49. Charts. "Number Concepts".
Level - Ages 5-7 (Instructor Curriculum Materials)
Cost - $3.75
Description - Familiar animals illustrate the numbers 1 through 10 with different animals on each chart. The numbers and words are shown. The last two charts illustrate 11 through 20.

50. Film. "Numerals Everywhere".
Level - Ages 5-10 (Encyclopaedia Britannica Education Corp.)
Color 11 minutes 16mm film optical sound
Description - This film shows the use and concepts of various numerals in a child's environment through an ordinary shopping trip. Recognition of symbols are especially stressed.

51. Filmstrip. "We Learn Numbers" (Part I).
Level - Ages 4-6 (Eye Gate)
Description - This filmscript contains pictures to demonstrate the concepts of numbers 1 to 5. The frames are colorful, meaningful, and clear.

52. Filmstrip. "We Learn Numbers" (Part II).
Level - Ages 5-7 (Eye Gate)
Description - These frames illustrate groups of items from 6 to 10 to reinforce these number concepts. A review of the numbers 1-10 is also provided at the end of this filmstrip.

53. Instructional Material. "Quantity Tutor".
Level - Ages 5-7 (Child Craft Education Corporation)
Cost - $7.95
Description - This material aids a child's visualization of quantities and number operations by matching plastic pieces on verbal instruction or by an identical picture of the set. Self-correcting.

54. Instructional Material. "Giant Bead Stair".
Level - Ages 5-7 (Child Craft Education Corporation)
Cost - $7.95
Description - Easy to grasp beads are 1 3/4" and graded by colors from 1-5. May be used for set recognition, matching and set completion.

55. Book. "My Golden Counting Book".
Author - Moore, Lillian
Level - Ages 3-6 (Western Publishing Co.) (1957)
Cost - $1.00
Description - Colorful pictures of sets 1-10 with the appropriate numeral included on each page.

56. Flashcards. "Number Concept Cards".
Level - Ages 3-7 (Mead School Products)
Cost - $2.50
Description - These large cards with clearly defined pictures and patterns are good for use for drill in numbers, numerals, and set identification 1-10.

57. Kit. "Early Childhood Enrichment Units: Number Readiness".
Level - Ages 4-7 (Milton Bradley)
Cost - $55.00
Description - This kit provides small group learning experiences such as; sorting, matching, equivalents and non-equivalents. Includes; flannelboard and cutouts, plastic and wooden counters, peg boards and pegs, dominoes, abacus, manipulatives, etc. A teacher's guide is also included.

58. Kit. "Match Mates".
Level - Ages 4-7 (Creative Playthings)
Cost - $3.75
Description - This kit contains ten puzzles with numbers on the top and places for corresponding objects below. Useful for set recognition activities.

59. Instructional Material. "Pro-Po Math Blocks".
Level - Ages 4-7 (Lakeshore Equipment Co.)
Cost - $16.50/set.
Description - Set includes 58 wooden blocks engraved with numerals and dots from 1 to 10. Each block is accurately sized in correct proportion to the number it represents. Useful for showing correct proportions in numbers, set identification and tactile learning.

60. Film. "Structural Arithmetic".
Level - Ages 5-8 (N.Y.S. Dept. of Education) (1967)
Black/white 30 minutes 16mm film optical sound
Description - The sequential development of the numerical concept of ten is demonstrated by Margaret Stein through counting and pattern boards.

61. Instructional Material. "Footsteps to Numbers".
Level - Ages 3-6 (Dick Blick)
Cost - $8.00/set.
Description - 10 washable crepe rubber non-skid footsteps in bright yellow with easy to see large black numerals and dots. Each footstep is 11 1/2" x 4 1/4" x 3/16" thick. This material helps to develop the understanding of concrete and abstract number concepts, left and right, sequencing, motor skills and coordination, and counting from 1 to 10.

62. Instructional Material. "Counting Frame".
Level - Ages 3-7 (Playskool)
Cost - $3.69
Description - This is a counting frame or abacus with rows of colored beads that the child can count with as he moves the beads across.

63. Record. "Dancing Numerals".
Level - Ages 4-6 (Ed. Activ.)
Cost - $7.95
Description - This 33 1/3 longplaying record has counting in order from 1-10 and also counting in reverse order.

64. Instructional Material. "DLM Counting Cubicles or Color Inch Cubes".
Level - Ages 4-6 (Developmental Learning Materials)
Cost - $5.50 per box
Description - These are one inch cubes made of finished hardwood. They come in six primary colors, 16 cubes each of red, yellow, blue, green, orange, and purple.

65. Instructional Material. "Stepping Stones".
Level - Ages 5-7 (Child Craft Education Corp.)
Cost - $6.95
Description - This set contains ten 8" squares made of highly wear-resistant material. Non-skid squares need not be fastened to the floor. Provides concrete experiences in math concepts.

66. Kit. "Modern Mathematics Kindergarten Kit".
Level - Ages 4-6 (Milton Bradley)
Cost - under $10.00
Description - This kit consists of a number of flannel board shapes such as trees and stars, etc., and flannel numbers 1-10. Can be used for counting as well as set identification activities.

67. Filmstrip. "Numbers for Beginners".
Level - Ages 5-8 (Captioned Films for the Deaf)
Description - This filmstrip contains arithmetic or counting problems via animated cartoons. Many are merely counting exercises, others ask "what comes before or after", etc.
Note - Recommended previewing by teachers. The teacher might have to clarify what each frame is asking the child to do.

68. Instructional Material "Jumbo Letters and Numbers".
Level - Ages 4-6 (Novo Educational Toy Co.)
Cost - $7.50
Description - Set consists of 3 1/4" numbers 1-10, and upper and lower case letters in rubber frames which can be used for tracing, manipulation and recognition.

69. Film. "Magic Numbers".
Level - Ages 5-8 (Sterling Educational Films) (1968)
Color 20 minutes 16mm film optical sound
Description - This film illustrates the formation of the numbers 1-10 and the relationship between a number, its meaning, and its name.

70. Instructional Material. "Canned Shapes and Numerals".
Level - Ages 3-5 (Ed-U-Cards)
Cost - $2.00
Description - Children can match, identify and recall numbers as well as shapes. Brightly colored, velour backed numerals and shape help children develop power of observation, investigation, and discovery through sight and touch senses.

71. Instructional Material. "Self-Correcting Number Tray".
Level - Ages 5-7 (J.A. Preston Corp.)
Cost - $4.50
Description - Plastic colored squares with raised numbers and holes which fit on the appropriate number of pegs. Although it can be used for matching numbers and sets, it is excellent for touch recognition of numbers.

72. Captioned Film. "Addition for Beginners".
Level - Ages 5-8 (Captioned Films for the Deaf)
Description - A review of the concept of sets, numbers and numerals is followed by symbols of addition and the use of the number line in addition.

73. Instructional Material. "Number-Numeral Triple Tiles".
Level - Ages 6-8 (Milton Bradley)
Cost - $10.00
Description - A pegboard and pegs allows the child to place the correct amount of pegs in the holes in the tile to match verbal or printed numerals.

74. Record. "Fingergames".
Author - Matsushita, Marjorie
Level - Ages 3-5 (Ed. Activities) (1965)
Description - This is a 33 1/3 long playing rhyming record that small children will enjoy singing along with. It not only provides music enjoyment but helps teach simple mathematical concepts through the use of rhyme and fingerplay activity.

75. Book. "Fun with Rhymes".
Author - Frost, Marie
Level - Ages 3-5 (Cooke) (1967)
Description - This is a collection of short and simple rhymes, some of which deal with number concepts. It is a good introduction to counting, addition, and subtraction for the preschooler.

76. Book. "Two Little Trains".
Author - Brown, Margaret Wise
Level - Ages 3-5 (W R. Scott, Inc.) (1954)
Description - A colorfully illustrated story with a syncopated and rhyming text about two trains and their adventures on the tracks.

77. Book. "Two is a Team".
Author - Beim, Lorraine and Beim, Jerrold
Level - Ages 4-6 (Harcourt, Brace and World, Inc.) (1945)
Description - This is an amusing story of 2 little boys who are best friends and the adventure they had with the 2 little coasters they made. There are many objects of '2' that the child can count while the story is being read.

78. Picture Cards. "Counting Picture Cards".
Level - Ages 4-6 (Developmental Learning Materials)
Cost - $1.25
Description - There are 5 sets of colorful and easy to handle cards, with each set containing 1 to 6 colorful items. These cards can be used for matching equal sets of items.

79. Instructional Material. "How Many Apples Counting Blocks".
Level - Ages 5-7 (Special Education Materials, Inc.)
Cost - $13.50
Description - The set consists of 21 blocks made out of fiberboard. Each block has nine numerals, the written label, and pictures on both sides in contrasting colors.

80. Instructional Material. "Number Puzzle".
Level - Ages 5-8 (Childcraft Education Corp.)
Cost - $3.95
Description - Jigsaw pieces fit together in a 9 5/8" square insert. The object is to match numeral with correct group of spots on center piece then position "pie slices" with matching quantities of common objects.

81. Instructional Material. "Number Group Recognition Game".
Level - Ages 4-6 (Constructive Playthings)
Cost - $1.75
Description - Child learns to recognize numbers in different forms by matching cards of different sets of numbers that represent his number.

82. Instructional Material. "Number Counting Game".
Level - Ages 4-6 (Ed-U-Cards)
Cost - $1.50
Description - These are colorful number cards, 1-10, matching concept cards and heavy plastic markers for self-correcting. Useful for a variety of number activities as well as set identification.

83. Film. "Numbers in Our Lives".
Level - Ages 5-8 (BFA Educational Media)
Color 9 minutes 16mm film optical sound
Description - This film focuses on many of the ways in which numbers and their names are used by the members in the community, such as counting, measuring, playing games, etc.

84. Instructional Material. "Count and Match".
Level - Ages 6-8 (R.H. Stone Products)
Cost - $5.50
Description - This is a 2 piece, self-correcting jigsaw puzzle with the numerals 1-10 and groups of objects silk-screened on birch.

85. Instructional Material. "Plastic Numbers Set".
Level - Ages 6-8 (Educational Teaching Aids)
Cost - $2.75
Description - Dots on plastic, see-through cards for numbers 1-10 allow the child to match 2 card combinations to fit over the correct answer card. This self-correcting material is excellent for beginning equations.

86. Instructional Material. "The Equation Balance".
Level - Ages 6-10 (Special Educational Materials, Inc.)
Cost - $23.00
Description - This is a wooden balance 25" x 12". It also includes weights which are placed on the balance to visually show equality and inequality. An excellent introduction to balancing equations.

87. Instructional Material. "Link Numbers".
Level - Ages 6-10 (Milton Bradley)
Cost - $1.50
Description - This is an arithmetic aid that provides an interesting method for building number facts and play number games as well as balancing simple equations. It consists of die-cut numbers that link together.

88. Instructional Material. "Fit-a-Shape".
Level - Ages 3-6 (Mead School Products)
Cost - $4.50
Description - Twp sets of basic geometric shapes fit into a pair of 8" x 11 3/4" frames. One set of shapes matches frame for color association. All 3/16" thick in 3 colors.

89. Instructional Material. "Shapes Lotto".
Level - Ages 3-6 (Playskool)
Cost - $26.00
Description - Players match wood tiles in 6 geometric shapes to the same shapes on the lotto boards. Some boards have shapes imbedded in illustrations.

90. Instructional Material. "Shape Discs".
Level - Ages 3-8 (Mead School Products)
Cost - $4.50
Description - There are 32 2 3/4" diameter discs which contain a single, fit-in square, diamond, triangle or circle. All are 3/16" thick rubber shapes in eight bright colors.

91. Instructional Material. "Shift Shapes".
Level - Ages 4-7 (Little Kenny Publications)
Cost - $4.95
Description - Contains a design guide, 21" x 27" vinyl background board, and 50 3" multi-colored vinyl shapes (circles, triangles, squares and rectangles). Children may learn shapes and colors as well as create pictures. May also be drawn on with crayon and wiped clean.

92. Instructional Material. "Reading Shape Set".
Level - Ages 4-7 (Childcraft Education Corp.)
Cost - $7.50
Description - Large dominoes inscribed with common geometrical shapes. Set includes several games instructions. Excellent for shape discrimination activities.

93. Instructional Material. "Magnetic Basic Forms Board".
Level - Ages 4-7 (Child Guidance Toys)
Cost - $4.98
Description - This contains magnetic pieces in different shapes, sizes and colors, which can be put together to create a train, a house, etc., or used alone for recognition of basic geometric shapes.

94. Instructional Material. "Polytarget".
Level - Ages 4-10 (Special Education Materials, Inc.)
Cost - $18.00
Description - This is a versatile bean bag and ring toss target game. The top section is a circle and triangle on a pendulum which swings back and forth. The more force, the higher the swing. The bottom section nas geometric openings with big bright, colored hinged doors behind the triangle and square. Objects are thrown either through openings or up against doors which react to different weights and momentum.
Special Utilization - Can be placed on a desk for tactile exploration. Also helps develop perceptual motor and cognitive skills.

95. Instructional Material. "Shape Up".
Level - Ages 5-8 (Childcraft Education Corp.)
Cost - $4.95
Description - This game is played with board and shape up cards (cards showing geometric shape). Other materials and play activities are included to help children learn reading, writing, and visual perception skills.

96. Film. "Magic Shapes".
Level - Ages 5-10 (Sterling Educational Films) (1968)
Color 10 minutes 16mm film optical sound
Description - This film is good for reinforcement of basic shapes such as circle, square, triangle, and rectangle, and for readiness in reading, writing or arithmetic. Also included are the diamond and the cross.

97. Instructional Material. "Shape Stamps".
Level - Ages 6-9 (Developmental Learning Materials)
Cost - $9.00
Description - This contains twelve different rubber stamp shapes with the top labeled so the child can see which shape he is using. Can be used for a variety of activities.

98. Instructional Material. "Match Patch".
Level - Ages 6-12 (Pla-Mor)
Cost - $.39
Description - This is a deck of playing cards containing 36 different pictures to match with 4 key cards. Objects are illustrated colorfully with characteristic shapes outlined in black. Oval, squares, rectangles, circles and triangles are represented with 8 examples of each.

99. Kit. "Geometric Models".
Level - Ages 5-8 (Milton Bradley)
Cost - $4.00
Description - Over 100 yellow, 8 inch transparent plastic tubes with flexible joiners to aid in teaching the construction of geometric figures.

100. Instructional Material. "Magnetic Basic Form Board".
Level - Ages 5-9 (Child Guidance Toys, Inc.)
Description - This kit contains a sizeable magnetic board with several magnetic shapes in assorted sizes and colors. Around the border are several model forms that the child can use as an example for making these forms.

101. Instructional Material. "Geoboard".
Level - Ages 5-12 (Cuisennaire Co. of America, Inc.)
Description - Two different geoboards are mounted on opposite sides. On one side are 25 pegs evenly spaced in a rectangular shape while the other side has 12 evenly spaced pegs in the form of a circle. These geoboards are designed to be used separately with different colored rubber bands for aiding in the formation of various shapes and designs. Suggestions for the formation of different shapes are included.

102. Kit. "Perceptual Concept Series".
Level - Ages 6-8 (The Instructo Publications, Inc.)
Description - This kit contains 8 charts containing very clear shapes such as circles, squares, triangles, rectangles, ovals, diamonds and 2 charts showing assorted shapes. The child looks at each chart and attempts to see how each shape is formed. Included in the kit are master sheets for each chart. The teacher can ditto these sheets and allow each child to copy the basic shapes and even be able to find these shapes in his environment.

103. Book. "Creating With Paper".
Author - Johnson, Pauline
Level - Ages 8 and up (University of Washington Press) (1966)
Cost - $4.95
Description - This is an excellent book on creating objects, decorations, etc. from paper. It contains complete and easily-followed diagrams and instructions.

104. Instructional Material. "Canned Shapes and Numerals".
Level - Ages 3-5 (Ed-U-Cards)
Cost - $2.00
Description - Children can match, identify and recall shapes as well as numerals. Brightly colored, velour backed shapes and numerals help child develop powers of observation, investigation and discovery through sight and touch senses.

105. Instructional Material. "Shape-o".
Level - Ages 3-6 (Dart Industries, Inc.)
Description - This is a ball-shaped toy with ten geometric shapes cut out all around it and the 10 solid shapes are stored inside. Can be used not only for matching shapes to cut-outs, but also for touch identification activities.

106. Instructional Material. "Parquetry Design Blocks".
Level - Ages 4-7 (Milton Bradley)
Cost - $4.00
Description - 84 wood easy to handle blocks in squares, triangles and diamonds shapes. Excellent for kinesthetic activities.

APPENDIX B-2

RELATED MATERIALS - COGNITIVE PROCESSES

1. Dolls. "Dressy Bessy and Dapper Dan".
   Level - Ages 3-5 (Milton Bradley Co.)
   Cost - 20" doll - $10.25; 10" doll - $11.00/pair.
   Description - Child can learn to button, zip, snap, etc. with clothing on the dolls as well as identifying and labelling body parts.

2. Kit. "Peabody Language Development Kit, Level P".
   Level - Ages 3-6 (American Guidance Service, Inc.)
   Cost - $150 for basic kit.
   Description - The kit contains 2 intact manikins and one that is disassembled. It also contains color forms for parts of face and a set of cards denoting facial expressions.

3. Flannel Board Kit. "My Face and Body".
   Level - Ages 4-7 (F.L. Hammetts Co.)
   Cost - $4.95
   Description - Colorful and easy to identify flannel board kit. Includes the different face parts such as eyes, nose, mouth, etc. as well as the different parts of the body.

4. Book. "The Wonder of Hands".
   Author - Baer, Edith
   Level - Ages 5-8 (Parents Magazine Press) (1970)
   Cost - $3.95
   Description - This book shows us, via beautiful and clear photographs, the many things we do with our hands.

5. Instructional Material. "Stand-up Mirror".
   Level - All Ages (Childcraft Education Corp.)
   Cost - $19.95
   Description - Free-standing 16" x 48" mirror. Image is distortion free. There are aluminum-plated steel legs with rubber non-slip feet. May be used to help identify body parts.

6. Instructional Material. "Let's Go Fishing Game".
   Level - Ages 4-6 (Mead Educational Services)
   Cost - $9.95
   Description - A fishing pole with a magnet on the end encourages the child to carefully look at the picture on each fish. The child is then asked to fish for that picture.

7. Magazine. "Children's Digest Magazine - 'Finding Objects in Pictures' ".
   Level - Ages 6-12 (Children's Digest Magazine)
   Description - This magazine has a section that has a picture which contains a smaller picture embedded within it.

8. Instructional Material. "Figure Craft".
   Level - Ages 4-7 (Childcraft Education Corp.)
   Cost - $5.95
   Description - 200 unbreakable, brightly colored pieces in assorted sizes and shapes. The snap-together principle used in this manipulative structural set makes it possible to join pieces anywhere along their rim. Provides unlimited scope for free forms as well as conventional forms and designs.

9. Art Material. "Parquetry Paper".
Level - Ages 4 and up (Hammetts)
Cost - $.50/sheet.
Description - Colored gummed papers in various forms such as circles, squares, etc., can be used for identification and matching activities as well as art and design activities.

10. Instructional Material. "Duffel Bag o' Blocks".
Level - Ages 3-5 (Playskool)
Cost - $5.29
Description - This is a set of 120 wooden blocks in various sizes, shapes, and color. Can be used for a variety of labelling, sorting, and classification activities, and others.

11. Instructional Material. "Color Cubes and Design Sheets".
Level - Ages 3-8 (Playskool)
Description - Includes cubes and design sheets which can either be copied or used to make your own designs.

12. Instructional Material. "Attribute Block Class Set".
Level - Ages 4-8 (Invicta)
Cost - $16.50
Description - Set of polypropylene blocks in 5 shapes and 2 thicknesses, 3 colors for a total of 60 pieces. Storage tray included. Can be used for shape identification and classification among many other activities.

13. Filmstrip. "Developing Elementary Concepts - Set I".
Level - Ages 4-8 (Eye Gate)
Description - This filmstrip "A Circle is Never a Square" is designed to insure the fact that the child understands this concept as a common base for sound understanding and communication. The first part is an amusing situation graphically demonstrating the meaning of the concept. In the second half, one of the characters from the situation re-explains briefly the meaning of the concept employed.

14. Instructional Material. "Attribute Blocks and Logic Sheet".
Level - Ages 4-8 (Invicta)
Cost - $10.90/sheets, $16.50/blocks.
Description - Contains a set of 60 polypropylene blocks in 5 geometric shapes, 2 thicknesses, 3 colors and 2 sizes - 12 variations of each shape. Large size 4 x 4. Instructions and storage tray included.

15. Instructional Material. "Puzzle Cubes".
Level - Ages 3-6 (Mead School Products)
Cost - $4.95
Description - This kit consists of 24 cubes, each 1 1/8" x 1 1/8", which fit together to form an object. This material is good for developing visual discrimination and perception, eye and hand coordination, and problem solving, while challenging organizational ability.

16. Instructional Material. "Halves and Whole".
Level - Ages 4-6 (Developmental Learning Material)
Description - These are cards containing pictures of people, food, trees, houses, and animals. The cards are cut in half - must be fitted together to make a complete match.

17. Puzzle. "Cubasco Puzzle Blocs" (#93-8910).
Level - Ages 4-6 (Mead Educational Services)
Description - This puzzle is made of durable plastic with a four sided picture of various circus performers. The child must put together all of the parts to form a whole performer.

18. Instructional Material. "Bits of Wood".
Level - Ages 4 and up (R.H. Stone)
Cost - $5.50
Description - Every piece of plywood is cleanly die-cut, smooth and ready to be glued without sanding. A lasting material. Large and small pieces - no two are the same - all sizes and shapes. Can be used for collages, instruction, pictoral designs, sorting, matching, and counting.

19. Instructional Material. "Whole-Part-Whole".
Level - Ages 5-10 (R.H. Stone)
Cost - $13.50
Description - 25 wood right isosceles triangles; 12 13/16" x 12 13/16" inlay board. 3 sets cue cards, instructions. Becomes more complex as children gain experience recognizing equivalents and identity.

20. Instructional Material. "Swivel Magnifier".
Level - Ages 4 and up (Dick Blick)
Cost - $8.90
Description - 3 3/4" wide angle lens in study wood support 11" high. Locks firmly at desired angles by tightening easy-grip wooden side knobs.

21. Instructional Material. "Giant Magnifier".
Level - Ages 4 and up (R.H. Stone)
Cost - $15.00
Description - Wide angle 5" magnifying lens, always in focus; tripod legs detach to store flat. 11" high.

22. Instructional Material. "Lift-up Puzzle Games - Guess Whose Series".
Level - Ages 5-8 (Lakeshore Curriculum Materials)
Cost - $2.25/set.
Description - This set contains 10 4 1/2" x 3 1/2" folded cards. The "Guess Whose" series asks children to guess the animal while seeing only a part, such as feet, tail, or ear.

23. Book. "Spectacles".
Author - Raskin, Ellen A.
Level - Ages 5-10 (Atheneum) (1968)
Cost - $3.50
Description - This is a story of a little girl who needs glasses and won't admit it. The book shows pictures of her perception of objects with and without her glasses.

24. Magazine Poster. "Take a Close Look" (2/73, Vol. 1, No. 4).
Level - Ages 6-10 (Learning Magazine)
Description - The poster includes 10 photographs of magnified objects that the children are familiar with. Some objects included are; hair, tongue, grass, cloth, etc. The children must determine which picture goes with the appropriate familiar object. The answers are given in small print upside down at the bottom of the poster.

25. Flannel Aid. "Beginning Sounds".
Level - Ages 4-8 (Milton Bradley)
Cost - $4.00
Description - This flannel aid contains 21 sets of 3 pictures each. Provides a different beginning consonant sound with its corresponding picture.

26. Instructional Material. "Carnival of Beginning Sounds".
Level - Ages 5-8 (Instructo)
Cost - $5.95
Description - These cards provide meaningful practice in phonetic analysis. These can be used with beginners or in corrective reading. The children complete 15 card games matching pictures by beginning sound.

27. Poster Cards. "Vowel-Links".
Level - Ages 5-10 (Milton Bradley)
Cost - $4.00
Description - These poster cards are designed to give practice in the identification of vowel sounds. Each card is a full color illustration and a picture-word with one or two missing letters that are either a single or double vowel. Child must identify missing part to pronounce word correctly.

28. Puzzles. "Match the Sounds".
Level - Ages 6-9 (Lakeshore Curr. Materials)
Cost - $7.50
Description - Series of color-coded picture and letter cards on a puzzle board. Can be used for group or individual activities.

29. Instructional Material. "Go-Mo Cards".
Level - Ages 6 and up (Go-Mo Products, Inc.)
Description - Each box of cards deals with a different initial, medial or final consonant sound. Each set contains a number of pairs of cards with pictures representative of that particular sound.
Special Utilization - Can use the cards to play Go Fish, Old Maid, or Concentration.

30. Instructional Material. "Phonics Bingo".
Level - Ages 7-10 (Lakeshore Curr. Materials)
Cost - $6.00
Description -This letter-word game uses cards with animal pictures on one side and their names on the reverse side. Contains 40 game cards, 400 markers, 26 call-out cards with 9 letters on each card.

31. Book. "Indoor Noise Book".
Author - Brown, Margaret Wise
Level - Ages 3-6 (Harper and Row) (1942)
Cost - $3.95
Description - This is a simple little picture story book about a dog named 'Muffin' and all the noises he heard one day when he stayed in the house.

32. Book. "SHHhhhh...BANG: a Whispering Book".
Author - Brown, Margaret Wise
Level - Ages 3-6 (Harper and Row) (1943)
Cost - $3.95
Description - This is a colorful picture story book about a town where there were no sounds until one day when a little boy came to the town and made quite a commotion. Sound effects are cued through topography - i.e., whispers are in little type, and bangs, the largest.

33. Book. "Gobble, Growl, Grunt".
Author - Spier, Peter
Level - Ages 3-6 (Doubleday) (1971)
Cost - $4.95
Description - This is a cute book that has nothing more than pictures of many animals and what they say. The illustrations are brightly colored and attractive. Children will enjoy imitating animal sounds.

34. Book. "What Do the Animals Say?".
Author - Skaar, Grace
Level - Ages 3-6 (Young Scott Books) (1968)
Cost - $4.50
Description - This book is about the different things that many animals say. Included are chicken, cow, cat, dog, horse, duck, mouse, donkey, and children. Children will enjoy imitating the sounds of these animals.

35. Filmstrip Set. "Sight and Sound Discovery Trips".
Level - Ages 5-8 (Eye Gate)
Cost - set of 8 color filmstrips, 4 records, 30 student activity books, 1 tune book with record, teacher's manual - $94.00
Description - This filmstrip set will enable the class to take a field trip to the woods, farm, zoo, sea, circus, home, around the town, and the city, without ever having to leave the classroom.

36. Record Set. "Rhythmic Stunts for the Classroom".
Level - Ages 4-8 (Learning Arts)
Cost - 3 45 rpm records and teacher's guide - $6.00
Description - An assortment of hops, skips, jumps are described in this record set. Activities included are; bird hop, leap frog, inch worm, and many more.

37. Instructional Material. "Kitty in the Kegs".
Level - Ages 3-5 (Child Guidance Toys)
Description - 4 plastic barrels which fit inside each other illustrates the concept of big and little for young children.

38. Instructional Material. "Sponge Balls".
Level - Ages 3-6 (Developmental Learning Materials)
Cost - $.90/each (small), $1.60/each (large).
Description - Balls are made of soft foam and come in various colors. Diameters are 4" and 6 3/8" respectively. May be used for visual and motor skills as well as size relationships.

39. Filmstrip. "What's Big and What's Little".
Level - Ages 4-6 (Troll Associates)
Cost - $7.00
Description - This filmstrip explores relationships between big and little. Young children are encouraged to think, observe, and make their own comparisons.

40. Filmstrip. "Developing Elementary Concepts - Set I" (#X305B).
Level - Ages 4-8 (Eye Gate) (1974)
Description - This filmstrip, "Smaller than Large and Larger than Small", is designed to insure the fact that the child understands this concept as a common base for sound understanding and communication. The first part is an amusing situation graphically demonstrating the meaning of the concept. In the second half, one of the characters from the situation re-explains briefly the meaning of the concept explored.

41. Instructional Material. "Size Sequencing Cards".
Level - Ages 5-7 (Developmental Learning Materials)
Cost - $2.50
Description - Each pack contains a colorful set of 30, 4" x 4" cards presenting 5 different drawings each in 6 graduated sizes. Accompanying these are 30 caption cards also in 6 graduated sizes. The objects presented are; a frog, a bell, a guitar, a bench, and a key.

42. Poster Cards. "Positions in Space".
Level - Ages 3-6 (Beckley-Cardy)
Cost - $5.50
Description - These poster cards portray 15 space relationship concepts using appealing illustrations of elephants in easily understood situations. Concepts shown are; up-down, in-out, over-under, behind-in front of, on-off, open-closed, left-right, and between. Words are printed in large, easy-to-read type.

43. Filmstrips. "Primary Concepts I - Over-Under-On".
Level - Ages 5-8 (Educational Reading Services)
Cost - set of 2 filmstrips and record - $19.00
Description - Charming photography captures everyday world of children as it helps the child master concepts that are basic to pre-reading activities.

44. Chart. "Chart of Positions".
Level - Ages 5-8 (Scott, Foresman)
Cost - Free.
Description - This is a small chart with elves situated in various positions in a house. Each position is labelled.

45. Instructional Material. "Spatial Relationship Picture Cards".
Level - Ages 6-8 (Developmental Learning Materials)
Cost - $1.25
Description - There are 5 sets of 6, 2 3/4" x 4 1/2" color pictures each. Each set demonstrates six positions - on, under, left, right, in front of, and behind.

46. Instructional Material. "Positional Words and Pictures".
Level - Ages 6-10 (Childcraft Education Corp.)
Cost - $7.50
Description - 9, 3-card units are included in each plastic box with 4 boxes to a set. The tab and notch device on these laminated cards makes them self-correcting. "Position" words can be matched with their corresponding picture as well as matching sentence cards.

47. Books. "Perceptual Learning and Understanding Skills".
Author - Fitzhugh, Kathleen and Fitzhugh, Loren
Level - Ages 5-8 (Elementary Educational Council) (1968)
Description - This is a set of 7 books dealing with perceptual motor concepts and spatial perceptions including positional relationships and distance relationships. Emphasizes self instruction with programmed material.

48. Captioned Filmstrips. "Nursery Rhymes and Other Stories" and "Series on Reading".
Level - Ages 5-8 (Captioned Films for the Deaf)
Description - These 2 captioned filmstrips, "Nursery Rhymes and Other Stories" (including 'Little Red Riding Hood') and "Series on Reading", starring real children can be shown simultaneously to illustrate the differences between 'real' and 'imaginary' or 'fantasy'.

49. Instructional Material. "Nesting Blocks".
Level - Ages 3-6 (Dick Blick)
Cost - $12.40/set.
Description - 5 graduated sized blocks of hardwood that can be stacked vertically or nested together. Has round holes in the sides. Useful for putting blocks together in graduated size and inside one another.

50. Instructional Material. "Hula Hoop".
Level - Ages 4 and up (Special Education Materials, Inc.)
Cost - $1.00
Description - A hula hoop is a round piece of plastic tubing approximately 1 yard in diameter. All activities that can be done with a hula hoop are done on the 'inside'.

51. Filmstrip. "What's Inside? What's Outside?".
Level - Ages 5-10 (Hudson Photographic Industries)
Description - Illustrates without captions objects that are "inside" and objects that are "outside". Encourages student response.

52. Kit. "Classification Activity Kit".
Level - Ages 4-6 (R.H. Stone Products)
Cost - $6.95
Description - This table top kit consists of stand-up pet, toy, food, and clothing "shops" and 48 object cards to classify by placing in appropriate play store. Teacher guide included. Can be used individually or with a small group.

53. Filmstrip. "Concept Ordering and Discrimination".
Level - Ages 4-7 (Classroom Materials, Inc.)
Description - This filmstrip contains pictures of items which can be classified according to the following categories - toys, animals, clothes, and transportation. The clothes are further subdivided into foot through head categories. The transportation category can be regrouped according to highway transportation and water transportation.

54. Filmstrip. "Project Life - Perceptual Thinking Activities" (Level 1, Set 1, No. 3).
Level - Ages 5-10 (General Electric)
Cost - $7.00
Description - This is a filmstrip containing 30 frames of a variety of objects. A child is shown a series of 3 objects with a 4th object that has to be added. The child must select that object that goes with the other three. Possible choices are given in each frame.

55. Filmstrip. "Project Life - Perceptual Thinking Activities" (Level 1, Set 1, No. 6).
Level - Ages 5-10 (General Electric)
Cost - $7.00
Description - This is a filmstrip containing 40 frames of a variety of objects and shapes. The child must select that shape which most closely relates to the shape of the given picture.

56. Filmstrip. "Project Life - Perceptual Thinking Activities" (Level 2, Set 3, No. 3).
Level - Ages 5-10 (General Electric)
Cost - $7.00
Description - This is a filmstrip containing 30 frames of a variety of objects. A given set of objects is presented accompanied by 3 possible items that may be included in the given set. The child must select the 1 appropriate item from these 3 possibilities.

57. Film. "Classifying".
Level - Ages 6-10 (McGraw-Hill Films) (1970)
Black/White 25 minutes 16mm film optical sound
Description - This film illustrates that objects can be classified into groups by observable properties. Also shows that depending on the needs and wishes of the classifier, the same group of objects can be classified in a variety of different ways.

58. Film. "Grouping Things in Science".
Level - Ages 8-12 (Coronet Instructional Films) (1969)
Color 11 minutes 16mm film optical sound
Description - This film discusses the groups and subgroups science uses for classifying things, and why they are used for showing relationships.

59. Dittoes. "Frostig Program for the Development of Visual Perception".
Level - Ages 3 and up (Follett)
Cost - standardized test kit - $10.50, complete Frostig Remediation program box - $96.00
Description - Dittoes illustrating the concept of same-different with the teacher's guide are contained in the basic standardized kit. Available in beginning, intermediate, and advanced picture and pattern books with corresponding teacher's guide for developing visual perception skills.

60. Worksheets. "Starter Concept Master Sheets".
Level - Ages 4-6 (Scott, Foresman)
Cost - $18.00/set of 125 accompanying Reading Series.
Description - Each sheet contains 4 objects - 3 of which are the same and 1 that doesn't belong. The child must put an X on the picture that doesn't belong with the other 3.

61. Instructional Material. "Association Picture Cards III".
Level - Ages 4-7 (Developmental Learning Materials)
Cost - $3.25
Description - Contains 30 cards with 4 objects on each card. One of the objects on each card is not in the same category as the other three. The child must sort out the improper object.

62. Filmstrip. "Project Life - Perceptual Thinking Activities" (Level 1, Set 1, No. 7).
Level - Ages 5-10 (General Electric)
Cost - $7.00
Description - This filmstrip contains 30 frames depicting some visual absurdities. There is a choice within each frame whereby the child must find what is wrong with the picture.

63. Filmstrip. "Project Life - Perceptual Thinking Activities" (Level 2, Set 4, No. 9).
Level - Ages 5-10 (General Electric)
Cost - $7.00
Description - This filmstrip contains 30 frames of a variety of objects. The child is presented with a stimulus picture under which are four other pictures. The child must determine what object does not go with the stimulus picture.

64. Instructional Material. "Find a Pair".
Level - Ages 4-7 (Childcraft Education Corp.)
Cost - $8.95
Description - These cards may be used to play many games to test a child's perception. May be used individually or with groups of 2, 3, or 4 children. Contains 4 boxes of look-alike pictures which challenge the child to find the differences among them. Each box has 24 pictures which look similar. There are 12 pairs.

65. Instructional Material. "Scan".
Level - Ages 4-8 (Parker Brothers)
Cost - $2.75
Description - 24 pairs of large, color game cards plus holder. This speed matching game helps to build the ability to quickly match pairs of designs, shapes, patterns, colors, and positions.

66. Instructional Material. "Pick - Pairs Card Game".
Level - Ages 4-8 (Milton Bradley Co.)
Cost - $3.75
Description - This instructional material helps to develop matching skills, strengthen listening skills, emphasize work in left-to-right progression, and relates verbal descriptions with visual material. 108 cards present 54 pairs of everyday objects. Includes a plastic tray.

67. Filmstrip. "Project Life - Perceptual Thinking Activities" (Level 1, Set 2, No. 14).
Level - Ages 5-10 (General Electric)
Cost - $7.00
Description - Within each of the 40 frames in this filmstrip, the child is presented with a stimulus picture and a blank. Below are three possible pictures which would "go with" the stimulus picture in the blank. The child must select the correct one, thus completing the pair association.

68. Instructional Material. "Hereward Matching Cards Set".
Level - Ages 6-10 (Lakeshore Curr. Materials)
Cost - $7.50
Description - These 24 2" square cards can be matched into 12 pairs. Each pair differs only in minor detail from the other 11 pairs. 12 box set, graded in 3 levels of difficulty.

69. Instructional Material. "Spin and See Games".
Level - Ages 6-10 (Milton Bradley Co.)
Cost - $4.00
Description - 8 different games in one kit involving matching pairs of pictures to pictures, pictures to words, and words to words. Excellent material for developing visual skills.

70. Instructional Material. "Knobless Cylinders".
Level - Ages 4-6 (J.A. Preston Corp.)
Cost - $45.00
Description - These are various wooden sized cylinders which can be used for activities involving small and large correspondence and grouping according to size relationships.

71. Instructional Material. "Size and Shape Puzzle".
Level - Ages 4-6 (Developmental Learning Materials)
Cost - $3.25
Description - 3 objects given in 5 sizes each and consisting of 2 parts each. The 30 pieces in all fit into specified depressions. Excellent for discrimination of large and small as well as pairing parts of objects to form a whole.

72. Kit. "Invicta Sorting and Order Kit".
Level - Ages 4-8 (Invicta)
Cost - $19.95
Description - This kit includes 3 sorting trays and extensive sorting materials in a variety of shapes and colors including beads, shapes, squares, pegs, discs, and half-squares.

73. Filmstrip. "What's Wrong".
Level - Ages 6-8 (Encyclopaedia Britannica Films)
Description - This filmstrip contains approximately 20 frames showing objects or scenes in which a part of an item is left out or in which there is something wrong. The child must point out "what's missing" or "what's wrong".

74. Instructional Material. "Same or Different Size Cards".
Level - Ages 4-6 (Developmental Learning Materials)
Cost - $1.25
Description - Set of 30, 4 1/2" x 2 3/4" cards with pictured objects (2 per card). The objects on the cards are the same but are different sizes. Can also be used for size discrimination activities.

75. Instructional Material. "Shape Analysis Matching Cards".
Level - Ages 5-8 (Lakeshore Curr. Materials)
Cost - $3.25
Description - Cards showing randomly placed shapes must be matched to cards which show the same shapes in a composite figure. 36 pairs of 2 3/4" x 3 1/4" cards are included.

76. Instructional Material. "Motor Expressive Language Picture Cards I and II".
Level - Ages 4-6 (Developmental Learning Materials)
Cost - Set I - $1.25, Set II - $1.25
Description - Includes 30 cards in each set. Each set can be used for association and positional relationships between 2 items.

77. Instructional Material. "Sorting Box and Accessories".
Level - Ages 4-7 (Developmental Learning Materials)
Cost - $21.00
Description - Number-group matching and manipulation. Sorting box has a slot at the rear for positioning three code strips. Information on code strips identifies each of the ten slots on the top of the sorting box. Kit includes 70 tiles.
Special Utilization - color matching, number sequencing, number one-to-one matching.

78. Filmstrip. "Project Life - Perceptual Thinking Activities" (Level 2, Set 3, No. 5).
Level - Ages 5-10 (General Electric)
Cost - $7.00
Description - This filmstrip contains 36 frames which deal with geometric figures. Each frame requires a child to select the figure that will complete the analogy presented by 2 other figures. The child is presented with a relationship of two model figures. Using the third figure, he must select a fourth figure that will be analogous to the relationship presented by the model figures.

79. Instructional Material. "Category Cards".
Level - Ages 6-10 (Developmental Learning Materials)
Description - This material allows children to draw cards from other players to form "books" of the same categories. The categories included are; health aids, shapes, fruits, clothes, tools, vegetables, hardware accessories, musical instruments, and sports equipment.

80. Filmstrip Set. "Developing Cognitive Skills in Young Learners".
Level - Ages 6-10 (Educational Activities)
Cost - $7.00/each or 7 for $49.00
Description - These color filmstrips introduce fundamental intellectual concepts such as ordering, grouping and inferring, and many same and different relational concept categories.

81. Instructional Material. "4 Scene Sequence Cards".
Level - Ages 5-8 (Milton Bradley Co.)
Cost - $3.00
Description - Set of 12 four-part stories on 3" x 3" cards. Stories deal with dressing, eating, playing, and other familiar activities. Useful for sequencing and predicting outcomes.

82. Instructional Material. "12 Scene Sequence Cards".
Level - Ages 6-10 (Milton Bradley Co.)
Cost - $3.00
Description - Group of 48 color cards in 3" x 3" size. Coded for self-checking. Stories deal with dressing, eating, travel, sailing, and seasonal activities. Cards are flexible for group or individual discussions and activities.

83. Instructional Material. "Visual Categories Discovery Set(s)".
Level - Ages 5-12 (Eastman Kodak Company - Available through AECT)
Cost - less than $10.00
Description - Set(s) consist of packets of laminated, colored picture cards dealing with a wide range of subjects. Cards can be used individually or collectively. Used as a preliminary to storyboarding as well as sequencing and logical thinking.
Special Adaptation - Can be adapted for use at any level, bringing in appropriate language to go with the visuals.

84. Poster Cards. "Scene Sequence Posters".
Level - Ages 6-10 (Milton Bradley Co.)
Cost - $3.75
Description - Thirty 11 1/2" x 14" full color cards provide ten 3 step stories. Sequences emphasize left-to-right progression, eye coordination, and an understanding that events have a beginning and an end.

85. Instructional Material. "Reading Readiness Picture Cards" (Set No. 3).
Level - Ages 5-8 (Beckley-Cardy Co.)
Cost - $1.00
Description - This is a set of picture cards which show how action is built up through sequence. Can be used for predicting outcomes as well as sequencing activities.

86. Poster Cards. "Book I - Writing Stories with Julie and Jack".
Level - Ages 5-8 (St. John's School for the Deaf)
Cost - $3.25
Description - This is a set of 20 four-part stories on 8 1/2" x 11" papers. Includes a 15 page teacher's manual. Can be used for predicting outcomes in stories, sequencing, and story telling.

87. Filmstrip. "Kim's Bubble Bath".
Level - Ages 6-10 (Learning Arts)
Cost - $7.00
Description - This color filmstrip is a 10 frame picture story sequence. After the child views these frames, he must think of an ending to the story.

88. Instructional Material. "Picture Sequence Cards".
Level - Ages 6-10 (Milton Bradley)
Cost - $1.75
Description - This material contains combined groups of 4 scenes depicting actions in sequence. It includes a set of 80 2 3/4" x 5 1/4" cards. Group and individual instructions are included.

89. Instructional Material. "Sequencing with Julie, Jack and Friends".
Level - Ages 7-10 (St. John's School for the Deaf)
Cost - $3.50
Description - 80, 2" x 7" picture stories printed on tagboard. Includes exercises for developing skill in sequencing, story telling. Teaching suggestions included for group or individual instructions.

90. Instructional Material. "Cuisenaire Rods".
Level - Ages 3 and up (Cuisenaire)
Cost - classroom kits - $74.95
Description - Cuisenaire Rods are multi-colored and come in various sizes. Can be used for sequencing activities as well as understanding math concepts (addition, subtraction, multiplication, and division).

91. Instructional Material. "Sequential Picture Cards I".
Level - Ages 4-8 (Developmental Learning Materials)
Cost - $3.25
Description - This instructional material contains 5 sequences of 6 cards each. The pictures depict the time sequences involved in plant growth, seasonal changes, passage of daily time as related to people's activities, the 24 hour cycle of daylight to darkness, and steps in a production sequence.

92. Instructional Material. "Sequential Picture Cards II".
Level - Ages 4-8 (Developmental Learning Materials)
Cost - $3.25
Description - This material consists of 10 sets of 3 cards each which make up simple sequence patterns. This series is ideal for beginning sequence work with the young child. The sets of pictures are 6" x 5 1/2" and are heavy, varnished, and colorful.

93. Kit. "Let's Learn Sequence".
Level - Ages 4-10 (Instructo)
Cost - $5.50
Description - Children practice sequence through story building by placing three or six picture cards in order. Illustrations include favorite stories, nursery rhymes, and everyday experiences.

94. Filmstrip. "Developing Elementary Concepts - Set I" (#X305F).
Level - Ages 4-8 (Eye Gate) (1974)
Description - This filmstrip "Order: First Always Comes Before Last" is designed to insure the fact that the child understands this concept as a common base for sound understanding and communication. The first part is an amusing situation graphically demonstrating the meaning of the concept. In the second half, one of the characters from the situation re-explains briefly the meaning of the concept employed.

95. Instructional Material. "See Quees Circular Puzzles".
Level - Ages 5-7 (Hammett's)
Cost - $1.00
Description - These puzzles are of triangular pieces which fit into a circular sequence. For example; milk - from the cow to container, wood - from the tree to the table.

96. Instructional Material. "Instant Insanity".
Level - Ages 8 to adult (Teacher made material)
Description - Draw a 16 square grid (4 down and 4 across) on construction paper and 16 geometric shapes, consisting of 4 squares, 4 circles, 4 triangles and rectangles cut from construction paper of 4 different colors.
Special Utilization - The child must arrange shapes on first row of grid making sure not to duplicate a color or a shape across the row or down. The child proceeds using his own strategy until the grid is covered completely.

96. (Cont'd) When accomplished he must try to do it again not duplicating horizontally, vertically, or on the major diagonals.

97. Instructional Material. "Circle Sorting Set".
Level - Ages 6-10 (Invicta)
Description - With this material the child can place attribute blocks on a logic sheet and use logic to figure out which attribute goes on each circle on the logic sheet.

98. Filmstrip. "Try, Try Again".
Level - Ages 6-10 (Eye Gate)
Description - This filmstrip centers around situations and experiences familiar to all children and involves perserverance. A designated frame can be held on the screen while the class discusses ways of resolving the problem faced by the children in the story.

99. Instructional Material. "Reaction Cards".
Level - Ages 6-9 (Developmental Learning Materials)
Description - This set contains 24 cards which are divided into situations, i.e., one base card and 3 possible reaction cards. Each reaction card offers a different solution to the initial problem.

100. Instructional Material. "Lift Up Puzzle Game - Guess What and Where Series".
Level - Ages 6-10 (Lakeshore Curriculum Materials)
Cost - $2.25/set
Description - This set contains 10 4 1/2" x 3 1/2" folded cards. In the "Guess What and Where Series", the children must guess the second object after seeing only the first object.

101. Book. "Look Again".
Author - Hoban, Tana
Level - Ages 5-8 (Macmillan) (1971)
Cost - $4.95
Description - Through the use of photographs, this book takes objects and reveals a small part of them and asks, "What is it?" The 2 pictures that follow each part show the objects from 2 viewpoints. Some of the objects are a dandelion, an apple, a peacock, and a turtle.

102. Instructional Material. "Desk Top Attribute Logic Blocks".
Level - Ages 5 and up (Invicta)
Description - Geometric shapes of varying size and color help to teach sets, patterning, logical thinking, as well as problem solving.

103. Filmstrips. "Making Logical Judgments".
Level - Ages 6-10 (Educational Activities)
Cost - $7.00/each or 7 for $49.00.
Description - These 7 color filmstrips present fundamental intellectual concepts crucial to all school learning. Thinking skills, such as multiple categorization, relational concepts, visual comprehension, and the ability to recognize logical inconsistencies and logical analogies are developed in these filmstrips and will help to increase the students' logical thinking skills.

APPENDIX B-3

RELATED MATERIALS - THE PHYSICAL ENVIRONMENT

1. Film. "The Structure of the Earth".
   Level - Ages 8-11 (British Broadcasting Co. - TV)
   Black/White 20 minutes 16mm film optical sound
   Description - The earth's surface changing through erosion and deposition is illustrated in this film. Also shown is the structure and composition of the earth's surface and the speculation of the earth's inner core makeup.

2. Book. "Water All Around".
   Pine, Tillie S. and Levine, Joseph
   Level - Ages 7-10 (Mcgraw Hill) (1959)
   Description - Various water forms are depicted such as; water they see and use daily, and water that is seasonal.

3. Book. "The Brook".
   Carrick, Carol and Donald
   Level - Ages 5-7 (Macmillan Co.) (1967)
   Cost - $3.95
   Description - This is a story of a brook from its beginnings in a rainfall to its meeting with the sea.

4. Flannel Board. "Pollution Flannel Aid".
   Level - Ages 6-12 (Milton Bradley Co.)
   Description - This is a flannel board presentation of the most common forms of air, land, and water pollution, along with their origin, their appearance, and their remedy.

5. Filmstrip Set. "Pollution Series".
   Level - Adaptable for any age (Captioned Films for the Deaf)
   Description - 7 filmstrips (captioned) dealing with defining pollution, noise, water, air, and ground pollution as well as litter and trash and garbage disposal.

6. Film. "Pollution".
   Level - All ages (University of Southern California)
   Color 3 minutes 16mm film optical sound (1967)
   Description - This short animated film uses music and satire to illustrate the growing danger of air and water pollution in cities of the United States.

7. Collection. "Rocks and Minerals Geological Collection".
   Level - Ages 6-11 (Hammetts)
   Cost - $10.00/set
   Description - 30 special rocks and materials in this zoologist collection fit into various niches which show exactly where the rock can be located in the strata of the earth's crust.

8. Film. "Mountains - a First Film".
   Level - Ages 5-9 (BFA Educational Media) (1969)
   Color 9 minutes 16mm film optical sound
   Description - This film explores the climate, altitude and life that exists in a desert located at the base of a mountain - to the forests and meadows on the mountain itself - to the ice and snow on the very peak of the mountain. Through cause and effect, erosion is explored and also the formation of streams from the melting of ice and snow.

9. Film. "Mountains".
Level - Ages 5-9 (Indiana University Audio Visual Center)
Color 9 minutes 16mm film optical sound (1967)
Description - This film depicts the differences between mountain ranges, peaks and systems, and the effect mountains have on the weather and mountain animal and plant life.

10. Film. "The Mountains" (2nd ed.).
Level - Ages 4-6 (Arthur Barr Productions) (1956)
Color 10 minutes 16mm film optical sound
Description - This film explores the plant life and animal life found at various levels on a mountain. Also shows the importance mountains have for not only supplying man with water from its streams, but as a means for recreation.

11. Filmstrip. "The Moon - Our Nearest Neighbor in Space".
Level - Ages 9-11 (Eye Gate)
Cost - $6.00
Description - Descriptive filmstrip dealing with the scientific approach to the many facets of the moon such as; its orbit, its phases and formation theories, etc.

12. Filmstrip Set. "Wonders of the Sky" (Revised).
Level - Ages 9-13 (Eye Gate)
Cost - set of 9 captioned color filmstrips with teacher's manual - $48.50, individual filmstrips - $6.00
Description - The history of astronomy from the time of cave men to the scientific technology of the space age today is illustrated through this set.

13. Filmstrip. "Finding Out About the Sky".
Level - Ages 7-10 (Society for Visual Education)
Cost - $7.00
Captioned
Description - This filmstrip answers some of the things about the sky that young children may be curious about. It deals with the following: What things do we see in the sky? What makes a day dark or light? What makes a day warm or cold? What are star pictures?

14. Film. "The Stars Through the Seasons".
Level - Ages 9-11 ((Coronet Instructional Films) (1970)
Color 14 minutes 16mm film optical sound
Description - This film shows the stars and constellations changing their locations with the seasons. Also explains a solar and sidereal day.

15. Film. "The Country Mouse and the City Mouse".
Level - Ages 5-7 (Popular Science Publishing Co.) (1968)
Color 5 minutes 16mm film optical sound
Description - This film presents the colorful children's story of the Country Mouse and the City Mouse.
Special Utilization - Can be used to develop language art skills and to stimulate and encourage imagination and creativity.

16. Book. "Country Noisy Book".
Brown, Margaret W.
Level - Ages 4-5 (Harper - Row) (1940)
Cost - $3.95
Description - Picture storybook describing a little dog's trip to the country and all the noises he heard in his trip.

17. Book. "Noisy Book - City".
Brown, Margaret W.
Level - Ages 4-5 (Harper - Row) (1939)
Cost - $3.95
Description - Picture storybook describing a little dog in the city and the sounds he hears.

18. Film. "Home on the Farm".
Level - Ages 5-7 (United World Films, Inc.) (1966)
Color 15 minutes 16mm film optical sound
Description - This is a story of children living on a farm as they help with family chores and become involved in farm activities. Includes narration and captions. Can also be used for a unit on farm animals or cooperation.

19. Filmstrip. "A Ride in the Country".
Level - Ages 4-6 (Captioned Films for the Deaf)
Description - This filmstrip tells what types of animals this family sees on their ride through the country. At the end of the filmstrip is a test in which the child tries to identify the animal named in the caption.

20. Instructional Material. "Farm Lotto".
Level - Ages 5-7 (Edu-cards)
Cost - $2.00
Description - Lotto game with all animals, people, and objects that belong on a farm.

21. Film. "The Shape We Live With".
Level - Ages 5-9 (William Boundey)
Color 14 minutes 16mm film optical sound
Description - This film is an introduction to the four basic geometric shapes: circle, square, triangle and rectangle. The sphere, cylinder, cone and cube are also demonstrated.

22. Film. "Everything Has Lines and Shapes".
Level - Ages 5-7 (Captioned Films for the Deaf)
Description - This captioned film involves the children with finding geometric shapes in common things in the environment.

23. Filmstrip. "What's Round?".
Level - Ages 6-7 (Hudson Photographic Industries, Inc.)
(1968)
Description - Color pictures of everyday objects zooming in on their specific shape characteristics from various angles with frames asking the question "What is Round?". Objects illustrated are gum balls, traffic lights, watch, wheel, light bulb, orange, cans, cups, grapes, pencil tops, hydrant, key locks and garbage cans.

24. Filmstrip. "What's Square".
Level - Ages 3-7 (Hudson Photographic Industries, Inc.)
Description - This filmstrip contains numerous colorful pictures of square things seen in our environment, e.g., boxes, windows. It is excellent for making the child notice the 'squareness' of objects readily seen about him.

25. Film. "Plants and Their Importance".
Level - Ages 5-9 (Films/West, Inc.) (1969)
Color 11 minutes 16mm film optical sound
Description - This film illustrates some of the basic concepts about plants It also shows the importance of plants in our daily lives.

26. Book. "Up Above and Down Below".
Webber, Irma E.
Level - Ages 4-7 (Young Scott Books) (1943)
Cost - $3.25
Description - The child is shown the parts of many plants - above and below the ground. They learn how plant food supports all human and animal life.

27. Book. "Discovering the Outdoors: Investigations of Life in Fields, Forests, and Ponds".
Pringle, Laurence P., Ed.
Level - Ages 8-13 (Doubleday)
Cost - $4.95
Description - This is an excellent book for discovering the numerous types of life, especially plant life in different environments. Excellent photographs.

28. Film. "All Things Are Either Living or Non-Living" (Basic Concepts in Science Series - Level I).
Level - Ages 5-8 (Eye Gate)
Cost - super 8mm color film cartridge - $22.00
Description - This particular film cartridge deals with the concept that all things are either living or not living and how to recognize and make distinctions between both.

29. Filmstrip Set. "What is: A _____?".
Level - Ages 5-8 (Eye Gate)
Cost - set of 6 color filmstrips, 3 records - $46.00, individual filmstrips - $6.00, individual record - $5.00
Description - This filmstrip series introduces the natural and physical environment to the young child. Depicted are rocks, plants, animals, water, clouds, and day and night. Although it is a film that can be used in a variety of ways, it can also be used as an introduction in distinguishing the living from the non-living.

30. Filmstrip Set. "The Wonders of Nature".
Level - Ages 6-8 (Eye Gate)
Cost - 10 captioned color filmstrips, 5 cassetts, teacher's manual - $78.75. individual filmstrip - $6.00, individual cassett - $5.50
Description - This colorful filmstrip set is an excellent introduction to the natural environment. Some subjects depicted in this set are plants,

(Cont'd)

30. seeds, weather, homes, and around the water, etc. Can also be used as a basis for the child's ability to distinguish the living from the non-living.

31. Transparencies. "Plants - A Series".
Level - Ages 9-13 (Robert J. Brady Co.) (1964)
Description - Although grouped in this section, this set of 6 transparencies can be used in a variety of ways. Included are the topics; "Food Factory", "Importance to Man", "Plant Conservation", "Plant Motion", "Plant Structure", and "Types of Plants".

32. Instructional Material. "Root-Vue Box".
Level - Ages 4-5 (Childcraft Education Corp.)
Cost - $14.95
Description - Self-watering planter - 12" long x 9" high. Sturdy redwood box with a plastic window for viewing the progress of carrots, radishes and onions. Comes with growing instructions, soil, seeds, timing marker and 48 page gardening handbook.

33. Book. "Growing Plants From Fruits and Vegetables".
Sholinsky, Jane
Level - Ages 6 and up (Scholastic Book Services) (1974)
Cost - $.45
Description - This book shows many ways of starting new plants from fruit and vegetable seeds and cuttings. The book is illustrated well, and easy to follow instructions for all ideas are included.

34. Pictures. "Teaching Pictures/Food and Nutrition".
Level - Ages 5-9 (David C. Cook Pub. Co.)
Description - Colorful pictures of basic food groups such as fruits, vegetables, etc. Are adaptable for a wide variety of uses.

35. Captioned Filmstrip. "Leaf and Stem Vegetables".
Level - Age 6 and up (Captioned Films for the Deaf)
Description - This filmstrip shows in clear pictures such vegetables as lettuce, cabbage, brussel sprouts, cauliflower, broccoli, spinach, celery, asparagus, rhubarb. Also illustrated are various ways we use each vegetable.
Special Utilization - The concepts can be advanced for the younger child so the teacher may be required to adapt the language to her group. Parts of the filmstrip can also be shown to present only some of the vegetables.

36. Captioned Filmstrip. "Seeds and Other Vegetables".
Level - Ages 6 and up (Captioned Films for the Deaf)
Description - This filmstript shows clearly such vegetables as corn, beans, tomatoes, peppers, cucumbers, pumpkin, squash, etc. and illustrates how these vegetables are prepared for consumption.
Special Utilization - This filmstrip teaches advanced concepts and therefore could be simplified for use with younger children.

37. Kit. "Peabody Language Development Kit Level P".
Level - Ages 5-7 (American Guidance Service, Inc.)
Cost - $150.00 for basic kit.
Description - This kit contains very clear pictures of foods both in natural and prepared states and a tray of plastic fruits and vegetables. Can be used in a variety of games and activities for identification and classification of foods.

38. Book. "Life Picture Book of Animals" (rev. ed.).
Mason, Robert G., Ed.
Level - Ages 4-5 (Time-Life Books) (1969)
Cost - $3.95
Description - This is a beautiful book containing pictures of many animals - both usual and unusual. The photographs are all in color, and some are closeups while others are distance shots. Some of the animals included are cheetahs, swan, elephants, moth, tree frog, platypus, monkeys, mandril, python and viper.

39. Book. "Animals Everywhere".
D'Aulaire, Ingri and Edgar
Level - Ages 4-7 (Doubleday) (1954)
Cost - $4.70
Description - This book is an introduction for young children to the world of animals in their natural living conditions from the tropics to the arctic regions. Gives the child the opportunity to hunt for and to imitate the cries of each animal mentioned.

40. Book. "Some of Us Walk, Some Fly, Some Swim".
Frith, Michael
Level - Ages 6-8 (Random) (1971)
Cost - $3.50
Description - Because of its factual information and the clear and colorful illustrations, this book can also be used as a resource supplement in an animal unit.

41. Book. "500 Animals From A to Z".
Gergely, Tibor
Level - Ages 7-12 (McGraw)
Cost - $4.95
Description - This is a dictionary of almost every animal one can imagine. It contains a picture of each animal, its name, its size, and some facts about the animal.

42. Instructional Material. "Animal Dominos".
Level - Ages 5-8 (Edu-Cards)
Cost - $2.00
Description - 28 matching dominos in color.

43. Instructional Material. "Ani-Space".
Level - Ages 3-8 (Mead School Products)
Cost - $5.00
Description - thirty realistic animals in their natural stance (eight farm and seven zoo types) fit into four 8" square frames to stand erect. Each animal 3/16" thick in four colors.

44. Book. "A Dozen Little Plays".
Jarvis, Sally; Walker, Barbara; Sperling, Louis; and Rhodes, James
Level - Ages 7-9 (Scholastic Book Services) (1971)
Cost - $1.00
Description - The plays included are short and easily costumed and performed and particularly related to animals. Many have a moral. Can also be used for many language development activities.

45. Captioned Film. "Zoo Families".
Level - Ages 3-8 (Captioned Films for the Deaf)
Description - The film shows a variety of baby and adult zoo animals and illustrates the habits and characteristics and needs of captive animals.

46. Book. "If You Were an Eel, How Would You Feel?".
Simon, Mina
Level - Ages 4-8 (Follett) (1963)
Cost - $3.95
Description - The book puts the reader in the place of many animals, including an eel, bear, tortoise, bat, cat and seal. It discusses what it is like to be the animal and how it is different from being human.

47. Flannel Board Set. "Make a Funny Story".
Level - Ages 5-9 (Instructo)
Cost - $4.95
Description - This set contains 16 half animals, 8 places to live, 10 things to eat, and other objects needed to build a story. Excellent aid for language development.

48. Book. "Elf Owl".
Buff, Mary and Conrad
Level - Ages 7-10 (The Viking Press) (1958)
Cost - $3.50
Description - This book gives us a birdseye view of the world of a little owl in a wildlife community of an American desert.

49. Book. "What is a Cow".
Darby
Level - Ages 6-8 (Benefic Press) (1963)
Cost - $2.40
Description - This book depicts a cow's existence and his basic needs and functions.

50. Filmstrip Set. "Animals and Their Ways".
Level - Ages 9-11 (Eye Gate)
Cost - set of 9 captioned color filmstrips with 5 cassettes and teacher manual - $73.50, individual filmstrip - $6.00, individual cassette - $5.50
Description - This set is designed to show the relationship of animals to man along with the protection and care of animals.

51. Captioned Film. "Animal Homes".
Level - Ages 3-8 (Captioned Films for the Deaf)
Description - This film shows where various animals live, i.e., above ground, in the ground, and in the water and explains why these animals live where they do.

52. Book. "Everybody Has a Home and Everybody Eats".
Green, Mary M.
Level - Ages 4-7 (Young Scott Books) (1961)
Cost - $3.95
Description - This book depicts the various homes and needs of certain animals. It is an excellent resource supplement for an animal unit.

53. Book. "A Fish Out of Water".
Palmer, Helen
Level - Ages 4-8 (Beginner Books) (1961)
Cost - $2.50
Description - This is an easy to read book that tells an amusing story about a goldfish named Otto and where he lives, and what happens when he keeps growing and growing.

54. Book. "Over in the Meadow".
Langstaff, John and Rojankovsky, Feodor
Level - Ages 5-8 (Harcourt, Brace and Jovanovich) (1967)
Cost - $3.95
Description - This is a beautiful poem about the existence of turtles, muskrats, fish, salamanders, frogs, etc. It is beautifully illustrated by Ezra Jack Keats. Can be used in a variety of classroom experiences.

55. Book. "Lions in the Grass".
Busch, Phyllis S.
Level - Ages 5-8 (The World Publishing Co.) (1968)
Cost - $4.95
Description - The way lions live and their environment are depicted in this beautifully illustrated book.

56. Instructional Material. "Playskool Matchups - Animal Homes".
Level - Ages 5-6 (Playskool Manufacturing Co. Inc.)
Cost - $2.00
Description - 24 colorful and clear two piece interlocking puzzle pictures of animals and their homes. Can also be used in structuring parts to whole activities.

57. Filmstrip Set. "Friendly Animal Families".
Level - Ages 6-10 (Troll Associates)
Cost - $7.00 each or set of 4 for $28.00
Description - Set of 4 colorful filmstrips which encourage classroom discussion activities about animals and where they live. Filmstrip titles include; "Forest Families", "Jungle Animals", "Baby Birds High and Low", "Farm Babies Wake Up".

58. Book. "Wonders of the Owl World".
Lavine, Sigmund A.
Level - Ages 8-12 (Dodd) (1971)
Cost - $3.95
Description - Excellent photographs introduce owls in their natural surroundings.

59. Captioned Film. "Ecology: A Community Beneath the Sea".
Level - Age 5 and up (Captioned Films for the Deaf)
Color 9 minutes
Description - Little narration in this film encourages the viewer to observe the behaviors of living creatures in a community under the sea.

60. Book. "Boho's Dream".
Alexander, Martha
Level - Ages 4-7 (The Dial Press) (1970)
Cost - $3.50
Description - This is a story of a small dog's dream about himself and his master. Can be very useful in dealing with the care and love as the child puts himself in the little dog's place.

61. Pictures. "Pets".
Level - Ages 3-7 (Educational Reading Service)
Cost - $3.00
Description - 12 full-color pictures and 12 helpful resource sheets which suggest questions and activities. The pictures help the children learn about keeping and caring for pets.

62. Flannelboard. "Domestic Animals and Pets".
Level - Ages 5-6 (Milton Bradley)
Cost - $3.25
Description - Proper care and handling of pets and animals is illustrated to the child with this material. Contains full-color figures of many well-known animals and pets with food, water, cages and aquariums, etc.

63. Filmstrip Set. "Our Pets".
Level - Ages 5-8 (Eye Gate)
Cost - 9 captioned color filmstrip with 5 cassetts and teacher's manual - $73.50; individual filmstrip - $6.00 ; individual cassette - $5.50.
Description - All of these filmstrips can be used as instruments to develop love and care of pets and for classroom discussion of the children's pets.

64. Instructional Material. "Animals and Their Young".
Level - Ages 3-6 (Bekley-Cardy Company)
Cost - $2.95
Description - These 24 (2-part) puzzles match a baby animal to its mother.

65. Captioned Film. "Farm Babies and Their Mothers".
Level - Ages 3-8 Captioned Films for the Deaf)
Description - This film develops concepts of animal families by showing the adult animal with its baby, identifies seven specific farm animals, shows how animals help us and brings out characteristics of each animal.

66. Instructional Material. "Mother and Baby Animals". (Teach-a-Chart)
Level - Age 3 and up (Eye Gate)
Description - This set contains 7 (22 1/2" x 17") large colored pictures of farm animals. They are ducks, hens, turkeys, goat, horse, pig and lamb. Each picture shows the mother animal with offspring. Information (advanced science facts) is available for older children on the back of each picture.

67. Instructional Material. "Animals and Their Young" poster cards.
Level - Ages 5-8 (Educational Reading Service)
Cost - $3.00
Description - These poster cards are divided into two sets. One set has full-color illustrations of adult and young animals. The other set names the animals. By matching the picture cards and name cards, the child builds a vocabulary of 30 animal names. 30 cards, 11 1/4" x 14" on tagstock.

68. Book. "Don't Count Your Chicks".
D'Aulaire, Ingri and Edgar
Level - Ages 5-8 (Doubleday)
Cost - $4.95
Description - An amusing story of farm animals and farm life is pictured in this story of an old woman who counted her chicks before they were hatched.

69. Book. "All Kinds of Babies".
Selsam, Millicent E.
Level - Ages 5-8 (School Book Services) (1969)
Cost - $3.75
Description - Beautifully and realistically drawn pictures of all types of animal babies and their parents including cats, snakes, giraffes, camels, porcupines, chimpanzees, frogs, butterfly eels, crabs, ducks, bears and finally a human baby. The text is very simple and gives the names of the animals and speaks about how some animals look like their parents when they are babies and some do not.

70. Instructional Material. "Plant Growth".
Level - Ages 5-7 (Milton Bradley)
Cost - $3.25
Description - Illustrates plant growth from seed to mature plant. Various types of plants and plant sections. Separately printed names of plants and flowers included.

71. Instructional Material. "Let's Discover".
Level - Ages 5-8 (Guidance Associates)
Description - A multi-media resource for actively involving children in the wonders of seed germination, plant and animal life and ecological interactions. Includes actual materials for growing, filmstrips, books and record.

72. Book. "The Little Chestnut Tree Story".
Weil, Lisl
Level - Age 5 and over (Scholastic Book Service)
Cost - $.45
Description - This is the story of the life of a tree. It grew in the country and a city was built around it. Finally, the tree was chopped down but a seed is brought to the country to begin again.

73. Instructional Material. "See-Gro Seed Germination".
Level - Age 8 and up (Special Ed. Materials, Inc.)
Cost - $3.95 for 10 student pack
Description - This kit contains soil-less medium seeds, development domes, magnifying glass, assorted tools for preparation, instruction booklets and individual instruction sheets. Other set sizes available.

74. Film. "Mr. and Mrs. Robin's Family".
Level - Ages 5-10 (Captioned Films for the Deaf)
Description - An 11 minute color film presents the activities of a family of robins from early spring until late fall. It shows the development of the robin from conception to maturity.

75. Filmstrip Set. "Growing Things Filmstrip Set".
Level - Ages 6-10 (Special Education Materials, Inc.)
Cost - set of 7 filmstrips - $4.00
Description - This is a set of 7 filmstrips titled: "Plants Grow", "Trees Grow", "Butterflies Grow", "Toads Grow", "Birds Grow", "Rabbits Grow" and "We Grow". Excellent aid for plant and animal growth processes.

76. Book. "A Bird is Born".
Guilcher, J.M. and Bosiger, E.
Level - Ages 6-10 (Sterling Publishing Co., Inc.) (1968)
Description - This is the story of bird development from the period prior to birth to birth.

77. Book. "The Wonderful Egg".
Schloat, G. Warren, Jr.
Level - Age 6 and over (Charles Scribners Sons) (1952)
Cost - $4.95
Description - The development of an egg is shown in this book. Excellent for units in life processes of animals.

78. Book. "The Birth of Sunset's Kittens".
Stevens, Carla
Level - Ages 8-12 (Young Scott Books) (1969)
Cost - $4.95
Description - The book follows a cat, Sunset, through the birth of her five kittens. Good photographs.

79. Book. "How Babies Are Made".

Level - Age 8 and over (Time-Life Books)
Cost - $4.00
Description - The book is done with paper-folded pictures. It is organized and presented beautifully, in great detail for young children although recommended for fairly mature groups. Includes reproduction processes of flowers, chicks, dogs and humans. Also available in kit containing filmstrips and books.

80. Instructional Material. "Large Body Puzzle".
Level - Ages 3-5 (Developmental Learning Materials)
Cost - $5.00
Description - A large puzzle containing 31 pieces and made of heavy board. Is 4 feet tall when completed. Useful for naming body parts as each piece is assembled.

81. Captioned Filmstrip. "Show Me".
Level - Ages 3-5 (Captioned Films for the Deaf)
Description - This filmstrip serves as a review of parts of the face and other parts of the body. The teacher can expand on the ideas shown on the fr

81. (Continued)
Description - This filmstrip serves as a review of parts of the face and other parts of the body. The teacher can expand on the ideas shown on the frames.

82. Flannelboard. "Human Body Parts".
Level - Ages 3-5 (R. H. Stone Products)
Cost - $4.00
Description - May be used to help identify body parts on the flannelboard. This flannelboard contains heads, arms, legs and bodies clothed for summer and winter. Useful for teaching the identification of body parts as well as proper seasonal clothing.

83. Captioned Filmstrip. "Hands".
Level - Ages 3-7 (Captioned Films for the Deaf)
Description - This captioned filmstrip identifies hands and the various activities they perform in the natural course of everyday living such as holding things, washing, petting, waving, throwing, painting, etc.

84. Book. "Follow Your Nose".
Showers, Paul
Level - Ages 5-8 (Thomas Y. Crowell Co.) (1963)
Cost - $3.75
Description - The book not only identifies the nose but tells us about things we smell and how our noses work. Also available in filmstrip with record.

85. Instructional Material. "Animal Puzzles".
Level - Ages 5-8 (Milton Bradley)
Cost - $4.00
Description - The puzzles are cut into 10 to 12 meaningful pieces. (Head, feet, etc.) The child can assemble puzzle pieces together as he names each part and the whole animal. Useful for comparison of animal body parts to human and part to whole concepts.

86. Transparencies. "Signs of Spring and Autumn".
Level - Ages 5-8 (Eye Gate)
Cost - $19.90 set
Description - This set of 14 multi-involved transparencies help children observe and understand the causes and the events of seasonal change. Some topics are: "Trees get new Leaves", "The Days get Longer", "Birds Fly South", "We Wear Warm Clothes", etc.

87. Flannelboard. "Weather Flannel Aid".
Level - Ages 5-8 (Milton Bradley Co.)
Description - Changes in weather, dress and activities are illustrated in this flannel aid.

88. Film. "The Park".
Level - Ages 5-9 (Communico) (1970)
Color 7 minutes 16mm. film optical sound
Description - Through the use of mood music and narration including Thoreau's Walden, a park is portrayed from one season to another.

89. Captioned Film. "Winter: Story of Survival".
Level - Ages 5-12 (Captioned Films for the Deaf)
Color 13 minutes
Description - The effects of winter on plants and animals is depicted through migration, hibernation and those animals that stay. The film ends with the coming of spring and the returning of animals and blooming of plant life.

90. Film. "What's the Weather Like?".
Level - Ages 7-10 (McGraw-Hill Textfilms) (1967)
Color 10 minutes 16mm. film optical sound
Description - This film shows how climates and seasons affect homes and activities of people through the story of a family that had to change vacation plans because of the weather.

91. Instructional Material. "Blockmobiles".
Level - Ages 3-7 (Creative Playthings)
Cost - $9.95
Description - Solid wood transport fleet of ten cars, two trucks, bus, boat, snap-together train, thirty peg people and three trees are contained in this set. Can be used for identification and uses of transportation or for playtime.

92. Film. "Transportation Around the World".
Level - Ages 5-8 (Captioned Films for The Deaf)
Description - This film illustrates land, water and air transportation throughout the world. It relates modes of transportation used in different geographical locations.

93. Book. "The Giant Nursery Book of Things That Go".
Zaffo, George
Level - Ages 5-9 (Doubleday) (1959)
Cost - $5.95
Description - Giant picture book of many different moving vehicles and other modes of transportation.

94. Captioned Film. "How We Travel in the City".
Level - Ages 5-11 (Captioned Films for the Deaf)
Color 7 minutes
Description - Moving trains, automobiles, taxis, buses and airplanes depict the various modes of transportation used to commute people in a big city.

95. Book. "The Big Book of Real Trucks".
Cameron, Elizabeth
Level - Ages 6-10 (Dick Blick)
Cost - $1.50
Description - This 8 1/2" x 11 1/4" colorful illustrated hard cover book depicts the many different types of trucks.

96. Filmstrip. "Donald Duck Discovers Transportation".
Level - Ages 7-9 (Walt Disney)
Description - This animated filmstrip starring Donald Duck explores the world of transportation including uses, functions and various means of travel, etc.

97. Book. "The Big Book of Real Trains".
Duenewald, Doris, ed.
Level - Ages 7-12 (Dick Blick) (1970)
Cost - $1.50
Description - This 8 1/2" x 11 1/4" colorful illustrated hard cover book depicts the many different types of trains.

98. Instructional Material. "Sand Tools".
Level - Ages 3-6 (Childcraft Educational Corporation)
Cost - $2.50
Natural wood tools (rake, hoe, spade) with 8" handles are used for sand play activities as well as recognition and identification of common garden tools.

99. Instructional Material. "Sand Combs".
Level - Ages 3-6 (Child Craft Education Corporation)
Cost - $2.50
Description - For making swirls, swiggles or designs in sand. Six 9" x 3 1/2" x 1/8" wooden combs with different types of teeth used for different designs such as swirls and swiggles in sand.

100. Instructional Material. "Workshop Quality Work Bench & Tool Set".
Level - Ages 5-8 (R. H. Stone Products)
Cost - 22 piece tool set - $58.75
solid maple work bench - $85.50
Description - This set is designed to give beginners a straight start in developing, handling and completing ideas in a variety of woods. Bench is 44" long so that three children may work at one time.

101. Film. "Machine Help".
Level - Ages 5-9 (British Broadcasting Co.-TV) (1967)
Black/White 20 minutes 16mm. film optical sound
Description - This film shows how work is made easier through simple machines such as ramps and levers. Also shows how man invented simple machines, and that big and complicated machinery is really made up of simple, basic machines.

102. Captioned Film. "Machines Do Work".
Level - Ages 5-12 (Captioned Films for the Deaf)
Description - This 12-minute color film which discusses the use of the lever, the inclined plane, the pulley and the wheel-and-axle; illustrates how machines help make our work easier.

103. Book. "Mike Mulligan and His Steam Shovel".
Burton, Virginia Lee
Level - Ages 5-8 (Houghton Mifflin Company)
Cost - $3.75
Description - This is an interesting story about a steam shovel and how it solves the problem of going out of business because newer and better machines want to replace it. Can be role-played by children simulating the steam shovel's movements.

104. Captioned Filmstrip Set. "Practicing Good Health".
Level - Ages 5-12 (Walt Disney)
Cost - $55/set of 8 captioned filmstrips

104. (Continued)
Description - 8 filmstrips dealing with five senses in general and each individually. Includes the human body and comparison of human body with a machine. Excellent for simulating machine movement.
Special Utilization - Although the captions are most appropriate for upper primary and above, the highly visual and colorful content makes these strips adaptable at a lower level.

105. Book. "What is a Simple Machine".
Darby
Level - Ages 7 and over (Benefic Press) (1961)
Description - This film can serve as an introduction to simple machines such as; pulleys, levers, box-car train wit.. wheels, etc.

106. Lab Kit. "Early Learning Science Kit".
Level - Ages 3-7 (Special Ed. Materials, Inc.)
Cost - $2.25
Description - Each set contains one large horseshoe magnet 5" x 3", one magnifying glass, one 4" prism, 2 vinyl magnets, white paper 4" x 6", wire of aluminum and brass, 3" swatches of satin, burlap and cotton, 1 preserved butterfly and one package of pressed leaves with which the child can explore the wonders of nature. A comprehensive instruction booklet is provided.

107. Instructional Material. "Giant Magnet".
Level - Ages 4-7 (Childcraft Education Corp.)
Cost - $2.75
Description - 9 1/2" horseshoe magnet is easy to hold and comes with Keeper bar to lengthen magnet's life. Capable of pulling a wagon or lifting a whole string of metal objects.

108. Instructional Material. "Dapper Dan".
Level - Ages 5-7 (Smethport Specialty Co.)
Cost - $1.29
Description - An outline of a face is encased in plastic with a sizeable amount of steel shavings. The package also contains a magnetic pencil that is used to make a variety of faces - create eyebrows, beards, mustaches, hats, masks, glasses, etc. Some faces are illustrated so that the child may copy them.

109. Book. "Mickey's Magnet".
Branley, Franklyn M. and Vaughan, Eleanor K.
Level - Ages 5-8 (T. J. Crowell) (1956)
Cost - $3.95
Description - The book tells the story of a little boy who has a problem with some pins. Can be used as an introduction to magnets or problem-solving activities.

110. Film. "Magnets, Magnetism and Electricity".
Level - Ages 5-12 (McGraw-Hill Textfilms) (1970)
Color 9 minutes 16mm. film optical sound
Description - This film illustrates the major uses and functions of a magnet including the workings of a compass. Also included is an animated sequence of electrons in magnets and an electron flow in an electrical current.

111. Study Prints. "Picture/Word Concepts Series - Dishes & Utensils".
Level - Ages 5-8 (Instructor Publications)
Cost - $5.00
Description - This study print set contains picture cards for younger children and picture and word cards and word flash cards for older children of common kitchen utensils found in the home.

112. Filmstrip Set. "The Wonderland of Science".
Level - Ages 5-12 (Eye Gate)
Cost - set of 9 captioned color filmstrips, 5 cassettes, teacher's manual - $69.25; individual filmstrip - $5.50; individual cassette - $5.50.
Description - This filmstrip set introduces a practical and factual application of basic kitchen appliances and machines found in the home, and provides basic understanding of inventions that have changed the life-style of man.

113. Filmstrip Set. "The Story of Houses".
Level - Ages 5-8 (Eye Gate)
Cost - 9 captioned color filmstrips, 5 cassettes, teacher's manual - $73.50; individual filmstrip - $6.00; individual cassette - $5.50
Description - This filmstrip set illustrates many homes from the early cave dwellers to modern apartment buildings. This set also stresses why shelter is one of man's basic needs.

114. Filmstrip Set. "Understanding the Community".
Level - Ages 5-8 (Eye Gate)
Cost - set of 6 sound filmstrips, 3 records, teacher's manual - $46.00 (individual items available)
Description - This filmstrip set explores the typical community through its buildings and their functions and the similarities and differences all towns have.

115. Instructional Material. "Playskol Village".
Level - Ages 5-8 (Milton Bradley)
Cost - $7.50
Description - 97 colored wood parts in various shapes and sizes and colors. Young city planners can make village on 32" x 32" vinyl layout sheet.

116. Poster Cards. "Scenes Around Us Story Posters".
Level - Ages 6-10 (Milton Bradley)
Cost - $7.50
Description - These 12 colorful story murals provide visual representation of familiar buildings in a child's environment such as: grocery store, schoolroom, department store, etc.

117. Captioned Film. "Economics: Workers Who Build Houses".
Level - Ages 5-8 (Captioned Films for the Deaf)
Color 11 minutes
Description - The various stages of the construction of a house are shown. This includes planning, clearing the land, erecting the house and landscaping the property. Also shown are the various and different machines and building materials needed to complete the job.

118. Film. "The Builders".
Level - Ages 8-12 (American Educational Films)
Black/White 20 minutes 16mm. film optical sound
Description - The construction of a building is shown in this film from the foundation to the last girder on the top floor.

119. Filmstrip Set. "Field Trips Out of the Ordinary".
Level - Ages 8-13 (Eye Gate)
Cost - set of 6 filmstrips, 3 records - $57.00; individual filmstrip - $7.50; individual record - $5.00
Description - This filmstrip set takes the student on field trips to a steel mill, oil mine, and nuclear plant, etc. which are usually unavailable to the public for real trips. Not only is the student able to see these institutions but they are able to discover the raw ores and materials which enable man to build and construct.

120. Filmstrip. "Story of Steel".
Level - Ages 10-12 (Society for Visual Education, Inc.)
Description - This filmstrip describes where steel comes from and what it is used for.

121. Filmstrip. "A Bridge Gets Painted".
Level - Ages 7-9 Captioned Films for the Deaf)
Description - This filmstrip is about the reasons for and methods of bridge painting.

122. Filmstrip Set. "How Do We Build Things".
Level - Ages 9-12 (Eye Gate)
Cost - set of 6 color filmstrips, 3 records - $57.00; individual filmstrip - $7.50; individual record - $5.00
Description - This filmstrip set invites the student to observe man-made structure and recognize the planning and construction that was needed to build these structures.

123. Instructional Materials. "Toy Maker".
Level - Ages 2-8 (Tinker Toys)
Cost - $1.77
Description - The child can construct all variations of wheel toys using hardwood and plastic parts.

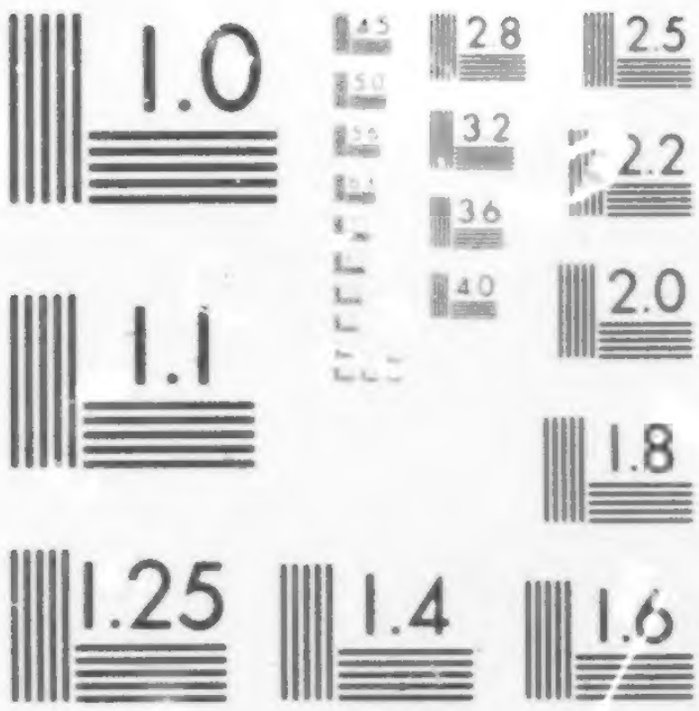
124. Captioned Filmstrip. "Wheels".
Level - Ages 4-7 (Captioned Films for the Deaf)
Description - This filmstrip shows the many varieties and uses of wheels in our environment. It shows how the roundness of wheels are helpful both at work and at play.

125. Filmstrip. "Bears on Wheels".
Berenstain, S. & G.
Level - Ages 4-7 (Eye Gate)
Description - This amusing filmstrip illustrates the story of the bears riding on different vehicles with wheels of different sizes and numbers.

126. Instructional Material. "The Wheels of Modern Transportation".
Level - Ages 5-8 (Constructive Playthings)
Cost - $1.00
Description - Brightly colored prints help illustrate modern methods of transportation as well as identifying the wheels of each. Truck, bicycle, bus, etc. are included.

127. Film. "What's So Important About a Wheel?"
Level - Ages 5-12 and above (Journal Films) (1960)
Color 10 minutes 16mm. film optical sound
Description - This film follows the history of the wheel through a question/answer type style as it shows the relationship of man's progress to it.

128. Captioned Film. "A Wheel is Round".
Level - Age 5 and up (Captioned Films for the Deaf)
Color 8 minutes
Description - This film, which is captioned especially for the deaf, explains the concepts that wheels are round and as such they roll easily. Activities shown are pushing, pulling and riding things with wheels.



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

APPENDIX B-4

RELATED MATERIALS - THE SOCIAL ENVIRONMENT

1. Instructional Material. "Wedgie Community Helpers".
   Level - Ages 3-6 (Mead School Products)
   Cost - $5.40
   Description - Six figures depict the roles of community helpers and hold the tools of their trades. Included are policeman, milkman, fireman, sanitation worker, mailman, construction worker. All figures are easy to grasp and non-toxic.

2. Instructional Material. "Wedgie Transportation Workers".
   Level - Ages 3-6 (Mead School Products)
   Cost - $5.40
   Description - Brightly colored figures of transportation workers such as pilot, stewardess, conductor, engineer, captain and sailor help teach roles of transportation workers in the community.

3. Instructional Material. "Pregnant Mrs. Pig and Family".
   Level - Ages 4-6 (Educational Design Association, Inc.)
   Cost - $6.00
   Description - Includes Mr. Pig, Mrs. Pig and three interlocking babies all made out of wood. Can be used in developing the concept of roles of families as well as farm fitting experience and an introduction to sex education.

4. Film. "Families".
   Level - Ages 5-8 (E. C. Brown Trust) (1970)
   Color 10 minutes 16mm film optical sound
   Description - Excellent film relating the interdependencies of all people. Stresses the sociological concept of the 'extended family' and why children are necessary for a family as well as why families are necessary for children. Although the film is graded for primary children, even the adult can benefit from viewing this film.

5. Film. "Families Are Different and Alike".
   Level - Ages 5-8 (Coronet Instructional Films) (1970)
   Color 14 minutes 16mm film optical sound
   Description - This film illustrates the concept that although many are different and many are the same, each family is important.

6. Flannelboard Kit. "When I Grow Up, I Want To Be". (SE 1556)
   Level - Age 5 and up (Special Ed. Materials, Inc.)
   Cost - $7.95
   Description - Felt figures to be "dressed" in a variety of occupational uniforms of approximately 36 occupations such as: doctor, nurse, policeman, pilot, artist, astronaut, ballerina, farmer, etc.

7. Poster Cards. "Community Workers & Helpers Poster Cards".
   Level - Ages 5-8 (Milton Bradley)
   Cost - $4.00
   Description - 15 occupations shown on 11 1/4" x 14" cards with 15 additional cards giving job descriptions. Useful for matching roles to printed names and for roleplaying. Also promotes understanding of community life and encourages storytelling.

8. Instructional Materials. "The Job Puzzles". (#P100)
Level - Ages 6-7 (Developmental Learning Material)
Description - These picture puzzles depict Community Helpers - mailman, nurse, teacher, fireman, football player, farmer, policeman, house-painter. The puzzles are cut in straight lines on uniquely-contoured pieces related to natural lines of the figure directing the child's attention to the picture rather than the shape of the piece.

9. Book. "At the Bakery".
Author - Colonius, Lillian
Level - Ages 6-10 (Melmont Publishers) (1967)
Cost - $3.00
Description - Although this book can be used to show the role of the baker and the bakery in the community, it is excellent for the child to depict cooperation among workers as well as machines and the overall finished product as a result of this cooperation.

10. Film. "Sharing Is Fun".
Level - Ages 5-8 (Family Films, Inc.)
Color 15 minutes 16mm. film optical sound
Description - This is a story of a young boy who befriends a new boy who has polio and who later learns a lesson through sharing and through cooperation.

11. Book. "The Dessert Lovers' Handbook".
Level - Ages 4-12 (Borden, Inc.) (1973)
Cost - free
Description - This cookbook can be used with supervison of younger children or without with an older group. Contains recipes for fudge, pies, brownies, cakes, ice cream, etc. Excellent for group working projects.

12. Film. "Laughing Gas" (The Dentist). Second Edition
Level - Age 5 and up (Mark Sennett) (1914)
Black/White 7 minutes 16mm. film optical sound
Description - This classic comedy stars Charlie Chaplin in a silent film (with score and sound effects added) as a dental assistant taking over when the dentist leaves the office.

13. Film. "The Music Box".
Level - Age 8 and up (Blackhawk Films Erstin-Phelon Corp.) (1932)
Black/White 30 minutes 16mm. film optical sound
Description - A classical comedy film involving Laurel and Hardy as they a attempt to deliver a piano to a house. Tops of a film.
Special Utilization - Can be used not only for enjoyment but also in problem-solving activities.

14. Film. "Music for Everybody".
Level - Age 4 and up (Walt Disney Productions) (1965)
Color 60 minutes 16mm. film optical sound
Description - Walt Disney's animated creation, Professor Ludwig Von Drake, as the maestro, introduces the various forms of music such as jazz, samba, opera, ballet and the symphony through animation and live action. Highlights of the film include: Benny Goodman and his Orchestra; ballet dancers, Lichine and Riabouchinska and the voices of Dinah Shore and Nelson Eddy.

15. Film. "Music".
Level - Age 5 and up (National Broadcasting Co. TV) (1970)
Color 53 minutes 16mm. film optical sound
Description - This film is a quick-cut, sound and story of music with little dialogue. Presents a wide range of music from a simple school orchestra to the Beatles rehearsing "Hey, Jude" with the Bach Festival Orchestra.

16. Book. "Music and Instruments for Children to Make". Vol. I
Author - Hawkinson, John and Faulhaber, Martha F.
Level - Ages 5-8 (A. Whitman) (1969)
Cost - $3.50
Description - Book includes songs, rhythm patterns and directions for making instruments.

17. Film. "Music in Action".
Level - Ages 5-10 (Nash, Grace C.) (1967)
Color 11 minutes 16mm. film optical sound
Description - This film shows how children are involved in all facets of music during a musical performance such as performers, composers and listeners.

18. Film. "Music Experiences - The Little Train of the Caipira".
Level - Ages 5-10 (J. P. Stevens & Co.) (1971)
Color 14 minutes 16mm. film optical sound
Description - Photography and animation introduces Villa-Lobos' composition, "The LIttle Train of The Caipira Sarte".

APPENDIX C

ALPHABETICAL LISTING OF PUBLISHERS AND DISTRIBUTORS

AECT
1201 16th Street, NW
Washington, D.C. 20036

Aims Instructional Media Services, Inc.
P.O. Box 1010
Hollywood, California 90028

American Educational Films
9879 Santa Monica Blvd.
Beverly Hills, California 90212

American Guidance Service, Inc.
Publishers' Building
Circle Pines, Minn. 55014

American Telephone and Telegraph
(Information Dept.)
195 Broadway
New York, New York 10007

Atheneum Publishers
122 East 42nd Street
New York, New York 10017

Arthur Barr Productions
P.O. Box 7-C
1029 N Allen Avenue
Pasadena, California 91104

Beckley-Cardy Company
(C/O Benefic Press)

Beginner Books
(C/O Random House)

Benefic Press
1900 N. Narragansett Street
Chicago, Illinois 60639

BFA Educational Media
2211 Michigan Avenue
Santa Monica, California 90404

Blackhawk Films Eastin-Phelan Corp.
1235 W. 5th Street
Davenport, Ia. 52805

Dick Blick Pub. Co.
P.O. Box 1267
Galesburg, Illinois 61401

Borden Products, Inc.
Great Meadow Road
Concord, Maine 01742

William Boundey
611 Anson Drive
Simi, California 93065

Milton Bradley Co.
74 Park Street
Springfield, Mass. 01101

Robert J. Brady Co.
130 Quest N.E.
Washington, D.C. 20002

British Broadcasting Co. - TV
630 Fifth Avenue
New York, New York 10020

E. C. Brown Trust
3170 S.W. 87th Avenue
Portland, Oregon 97225

Captioned Films for the Deaf
Media Services and Captioned Films
Bureau of Education for the Handicapped
U.S. Dept. of Health, Education and Welfare
Washington, D.C. 20202

CCM Films, Inc.
866 Third Avenue
New York, New York 10022

Child Guidance Toys
Bronx, New York 10472

Childcraft Education Corp.
150 E. 58th Street
New York, New York 10022

Children's Digest Magazine
Parents Magazine Enterprises, Inc.
52 Vanderbilt Avenue
New York, New York 10017

Classroom Materials, Inc.
93 Myrtle Drive
Great Neck, New York 11021

Communico
1335 N. Highway Drive
Fenton, Missouri 63206

Constructive Playthings
1040 East 85th Street
Kansas City, Missouri 64131

David C. Cook Publishing Co.
School Products Division
850 N. Grove Avenue
Elgin, Illinois 60120

Coronet Instructional Films
65 E. South Water Street
Chicago, Illinois 60601

Creative Playthings
Princeton, New Jersey 08540

Thomas Y. Crowell Company
201 Park Avenue, South
New York, New York 10003

The Cuisenaire Co. of America
12 Church Street
New Rochelle, New York 10805

Dart Industries
Hendon Airport
Orlando (Tupperware) Fla. 32802

Developmental Learning Materials
3505 N. Ashland Avenue
Chicago, Illinois 60657

The Dial Press
750 3rd Avenue
New York, New York 10017

Walt Disney Productions
Educational Film Division
500 S. Buena Vista Avenue
Burbank, California 91503

Dodd, Mead and Company
79 Madison Avenue
New York, New York 10016

Doubleday and Co., Inc.
School and Library Division
502 Franklin Avenue
Garden City, Long Island,
New York 11530

Edu-Cards Mfg. Co.
(a subsidiary of Binney and Smith)
380 Madison Avenue
New York, New York 10017

Educational Activities
P.O. Box 392
Freeport, Long Island,
New York 11520

Educational Development Laboratory, Inc.
(a division of McGraw-Hill)
284 Pulaski Road
Huntington, Long Island,
New York 11748

Educational Design, Inc.
Educational Resources Division
47 W. 13th Street
New York, New York 10011

Educational Reading Services
64 E. Midland Avenue
Paramus, New Jersey 07652

Educational Teaching Aids
159 W. Kinzee Street
Chicago, Illinois 60610

Encyclopedia Britannica Education Corp.
425 N. Michigan Avenue
Chicago, Illinois 60611

Encyclopedia Britannica Films, Inc.
1150 Wilmette Avenue
Chicago, Illinois 60091

Eye Gate House, Inc.
146-01 Archer Avenue
Jamaica, New York 11435

Family Films, Inc.
5823 Santa Monica Blvd.
Los Angeles, California 90038

Films/West Inc.
1522 N. Van Ness
518 N. La Cienega Blvd.
Hollywood, California 90028

Fisher-Price Toys, Inc.
East Aurora, New York 14052

Follett Publishing Co.
1010 W. Washington Blvd.
Chicago, Illinois 60607

General Electric Education Support Program
General Electric Company
P.O. Box 43
Schenectady, New York 12301

Go-No Products, Inc.
P.O. Box 143
Waterloo, Iowa 50704

Guidance Associates
(a subsidiary of Harcourt, Brace and Jovanovich)
41 Washington Avenue
Pleasantville, New York 10570

Hallmark's Children's Editions
C/O Hallmark Cards, Inc.
Kansas City, Missouri 64141

J.L. Hammett Co.
Hammett Place
Browntree, Mass. 02184

Harcourt, Brace and Jovanovich, Inc.
757 Third Avenue
New York, New York 10017

Harper and Row Publishers, Inc.
49 E. 33rd Street
New York, New York 10016

H-G Toys, Inc.
790 Park Place
E. Rockaway, Long Island,
New York 11520

Houghton Mifflin Co.
(Riverside Press, Cambridge)
2 Park Street
Boston, Mass. 02107

Hudson Photographic Industries, Inc.
Educational Products Division
Irvington-on-Hudson, New York 10533

Ideal School Supply
3316 S. Birkhoff
Chicago, Illinois 60620

Indiana University Audio-Visual Center
Bloomington, Indiana 47401

Instructo Products Co.
1635 N. 55th Street
Philadelphia, Pa. 19131

Instructor Curriculum Materials
(see The Instructor Publications, Inc.)

The Instructor Publications, Inc.
P.O. Box 6108
Duluth, Minnesota 55806

Journal Films
909 W. Diversey Pkwy.
Chicago, Illinois 60614

Kalish-Rapp Studios, Inc.
E. 51st Street
New York, New York 10017

Kenworthy Educational Services, Inc.
P.O. Box 3031
Buffalo, New York 14205

Lakeshore Equipment Co.
6036 Claremont Avenue
Oakland, California 94618

Lauri Enterprises
Phillips, Avon, Maine 04966

Learning Arts
P.O. Box 917
Wichita, Kansas 67201

Learning Magazine
530 University Avenue
Palo Alto, California 44301

Little Kenny Publications
4707 N. Kedzie
Chicago, Illinois 60625

The Macmillan Publishing Co.
866 Third Avenue
New York, New York 10022

C. F. McCabe, Inc., Educational Systems
Prospect Street
Huntington, Long Island,
New York 11102

McGraw-Hill Books and Text Film Co.
330 W. 42nd Street
New York, New York 10036

Mead Educational Services
245 N. Highland Avenue, N.E.
Atlanta, Georgia 30307

Melmont Publishers
1224 W. Van Buren Street
Chicago, Illinois 60607

Nash (Grace C.)
P.O. Box 1753
Scottsdale, Arizona 85252

National Broadcasting Co., TV
30 Rockefeller Plaza - Room 914
New York, New York 10020

New Reader's Press
(a division of Lawbach Literacy, Inc.)
P.O. Box 131
Syracuse, New York 13210

N.Y.S. Dept. of Education
Division of Educational Communications
Albany, New York 12224

Novo Educational Toy Corp.
124 W. 24th Street
New York, New York 10011

Parents Magazine Press
Parents Magazine Enterprises, Inc.
52 Vanderbilt Avenue
New York, New York 10017

Parkers Bros., Inc.
Salem, Mass. 01970

Playskool Products
(C/O Milton Bradley Co.)

Popular Science Publishing Co.
355 Lexington Avenue
New York, New York 10017

J. A. Preston Corp.
71 5th Avenue
New York, New York 10003

Random House, Inc.
The Random House Building
201 E. 50th Street
New York, New York 10022

Renewal Products Co.
(a division of the Learning Aids Group, Inc.)
Minneola, New York 11501

Scholastic Book Services
Division of Scholastic Magazines
50 W. 44th Street
New York, New York 10036

Scott, Foresman and Co.
433 East Erie
Chicago, Illinois 60611

William R. Scott, Inc.
333 Avenue of the Americas
New York, New York 10014

Charles Scribner's Sons
597 Fifth Avenue
New York, New York 10017

Mack Sennett
(see CCM Films, Inc. - distributor)

Smethport Specialty Co.
Smethport, Pa. 16749

Society for Visual Education, Inc.
1345 Diversey Pkwy.
Chicago, Illinois 60614

Special Education Materials, Inc.
484 South Broadway
Yonkers, New York 10705

Sterling Educational Films
P.O. Box 8497
Universal City, California 91608

J. P. Stevens and Co.
(see Aims Instructional Media
Services, Inc. - distributor)

St. John's School for the Deaf
C/O Sisters of St. Francis of Assisi
3680 S. Kinnickinnic Avenue
Milwaukee, Wisconsin 53207

R.H. Stone Products
13735 Puritan
Detroit, Michigan 48227

Time-Life Books
Time and Life Building
Rockefeller Center
New York, New York 10020

Tinker Toy
(a division of Questo Educational
Products)
Greenwood Street
Evanston, Illinois 60201

Troll Associates
320 Route 17
Monwah, New Jersey 07430

United World Films, Inc.
221 Park Avenue, South
New York, New York 10003

University of Southern California
Dept. of Cinema
University Park
Los Angeles, California 90007

University of Washington Press
1405 N.E. 41st Street
Seattle, Washington 98105

Viking Press, Inc.
625 Madison Avenue
New York, New York 10022

Franklin Watts, Inc.
845 3rd Avenue
New York, New York 10022

Western Publishing Co., Inc.
850 Third Avenue
New York, New York 10022

Albert Whitman and Co.
560 West Lake Street
Chicago, Illinois 60606

The World Publishing Co.
110 E. 59th Street
New York, New York 10002

Young Scott Books
(C/O William R. Scott, Inc.

APPENDIX D

DEMONSTRATION CLASS

DEMONSTRATION CLASS

The demonstration class tape included in the package was recorded during a summer school session in 1971 at St. Mary's School for the Deaf in Buffalo. The teacher, Judy Spring, used four of her students whose chronological age ranged from 6 to 10 years. The students were in a special class for children with learning and behavioral problems; their academic level ranged from preschool to primary (grade 1).

Judy used two segments of Sesame Street, a Lion Family film and a problem solving skit in which Buddy and Jim have difficulty with saving money in a piggy bank to introduce her class to some new concepts and new vocabulary. (The demonstration class tape is thirteen and a half minutes long. This is a result of editing almost two hours of Judy's class time that was taped. Therefore, although there is definite continuity within the tape, there was more to the class(es) than meets the eye).

Following is a copy of Judy's lesson plan for this class and for several that followed.

OBJECTIVES:

At the end of these classes the child will be able to:

1. Recognize the labels - lion, mother, father, baby, bank.
2. Associate the label with the appropriate picture;
3. Demonstrate that the four words lion, mother, father and baby, are a part of his vocabulary by properly using them in context;
4. Demonstrate his knowledge of the concepts of big and little by identifying the appropriate object;
5. Demonstrate his knowledge of the concept of saving;
6. Write the numerals 1, 2 and 3;
7. Recognize 1, 2 and 3 as quantitative values, and;
8. Associate proper color with each animal by coloring pictures of the animals.

LESSON:

A. Necessary Pre-teaching -
   1. Words - lion, mother, father, baby, bank.
   2. Introduce quantitative values of 1, 2 and 3.
   3. Visit zoo to point out baby animals, mother, and father.
   4. Introduce concept of saving money.

B. Class -
   1. View tape of the Lion Family and of Buddy and Jim with the Piggy Bank.
   2. Point out differences in the mother, father and baby lion. Using library books and sketches, show various pictures of lions.
   3. Relate concept of big and little to lions.
      a. Introduce cards - big and little.
      b. Show various pictures of big and little objects.
   4. Using real objects taped together, count them and classify them under the correct number (emphasize number 3).
      Examples: groups of 2 pencils, 3 lollipops, 3 blocks, 1 whistle, 3 pennies, etc.

C. Follow-up lessons -
   1. Color pictures of lions.
   2. Write numbers 1, 2 and 3.
   3. Construct banks from small boxes (Use paint, crayons or contact paper to decorate them).

4. Develop some money values with pennies.
5. Review:
   a. The child can associate the labels - mother, father, baby, lion with the appropriate animals.
   b. Given groups of two objects, the child can select the appropriate term - big, or little - to describe the size relationship.

D. Evaluation -

Evaluation is implicit in the attainment of the behaviors stated in the objectives.

MATERIALS:

1. Cards and pictures of: baby lion, father lion, mother lion, big, little, 1, 2 and 3.
2. Objects such as pennies, pencils, lollipops, blocks, crayons, etc. (Common objects in the classroom may be used).
3. Piggy bank.
4. Coloring pictures of lions.
5. Materials for constructing banks.
6. Books -
   a. My First Counting Book, L. Moore, Golden Press.
   b. My Counting Book, Diane Sherman, RAnd McNally.
   c. The Happy Lion, Louise Fatio, McGraw-Hill.
   d. Big Lion, Little Lion, Joe Kaufman, Golden Press.
   e. Big and Little, Joe Kaufman, Golden Press.
   f. The Farm Book, Jan Pfloog, Golden Press.
   g. The Little Farm, Lois Lenski, Oxford University Press.
   h. Farmyard Friends, William Gottlieb, Golden Press.

While viewing the tape, note the continuity of Judy's lesson. Using the Sesame tape to introduce the lesson and to focus attention, July follows with materials and activities which are natural, logical and desired tangents from the program.

It is interesting to be alert to at least two other features in the demonstration tape.

1. Notice how Judy is aware of each of the individuals in the class and allows them to mention unique experiences related to the class.
2. Near the end of the Buddy and Jim segment, note the look and posture of satisfaction on the students when they solve the problem before Buddy does.

This class gives an example how the Sesame Street segments might be used to introduce material and for motivation. Because of their brevity and of their interesting format, one can easily recognize their value in using for drill and reinforcement, as well as a culminating technique to summarize a lesson.

APPENDIX E

SESAME AND YOU, *TWO*
OBJECTIVES GRID
WITH RELATED ACTIVITIES, MATERIALS,
AND MINI SHOWS

Instructions for Objectives Grid

(Appendix E)

Appendix E is a list of Children's Television Workshop objectives chosen by the original 1971 summer workshop participants for use with this videotape package. In addition, this year's participants wrote additional objectives which are also included in the grid. These are identified by an asterisk (*).

The grid also includes related activities, related materials, and the appropriate Mini Show(s) to which each objective has been coded.

Under related activities, all appropriate activities for that objective are isolated. For example the objective "Given a printed letter, the child can select the identical letter from a set of printed letters", the related activities listed in the grid are [A-1, 4-7]. (A-1) refers to Appendix A-1 - Symbolic Representation; (4-7) refers to Activities #4 (Alphabet Match, #5 (Sorting Letters), #6 (Letter Bingo) and #7 (Color by Letter).

Under related materials, all appropriate materials for that objective are isolated. For the same objective as above, the related materials listed in the grid are [B-1, 4-6]. (B-1) refers to Appendix B-1 - Symbolic Representation; (4-6) refers to Materials #4 (Jumbo Alphabet), #5 (Rubber Stamp Alphabet), and #6 (DLM Alphabet Cards).

Under the column heading Mini Show(s), the first number in the parenthesis refers to the Mini Show while the second number refers to the segment within that Mini Show to which that objective is relevant in. For example, (6-4) refers to the fourth segment in the sixth Mini Show.

Objective	Related Activities	Related Materials	M
I. SYMBOLIC REPRESENTATION The child can recognize such basic symbols as letters, numbers and geometric forms, and can perform rudimentary operations with these symbols.	A-1, 1-127	B-1, 1-106	(1 (4 (7 (1 (1 (1 (1
A. LETTERS (Note: For most of the following goals, the training will focus only upon a limited number of letters. The entire alphabet will be involved only in connection with recitation). 1. Given a set of symbols, either all letter or all numbers, the child knows whether those symbols are used in reading or in counting.	A-1, 1-3	B-1, 1-3	
2. Given a printed letter the child can select the identical letter from a set of printed letters.	A-1, 4-7	B-1, 4-6	
3. Given a printed letter the child can select its other case version from a set of printed letters.	A-1, 8-11	B-1, 7-10	
4. Given a verbal label for certain letters the child can select the appropriate letter from a set of printed letters.	A-1, 12-15	B-1, 11-13	
5. Given a printed letter the child can provide the verbal label.	A-1, 16-18	B-1, 14-15	

	Related Activities	Related Materials	Mini Show(s)
TION nize such basic symbols as geometric forms, and can perations with these	A-1, 1-127	B-1, 1-106	(1-1) (2-1) (2-5) (3-1) (4-3) (4a-3) (5-1) (5-4) (6-1) (7-1) (7-3) (8-1) (9-4) (10-1) (11-1) (11-2) (12-1) (12-4) (12-5) (13-1) (14-1) (15-1) (15-2) (15-4) (17-5) (18-4) (18a-4) (19-3)
t of the following goals, ill focus only upon a of letters. The entire be involved only in con- ecitation). of symbols, either all ll numbers, the child knows se symbols are used in in counting.	A-1, 1-3	B-1, 1-3	(1-1) (7-1) (9-4) (19-3)
nted letter the child can identical letter from a ted letters.	A-1, 4-7	B-1, 4-6	(1-1) (4-3) (4a-3) (7-1) (9-4) (11-2) (12-4) (19-3)
nted letter the child can other case version from a ted letters.	A-1, 8-11	B-1, 7-10	(4-3) (4a-3) (7-1) (9-4) (12-4)
bal label for certain child can select the ap- etter from a set of printed	A-1, 12-15	B-1, 11-13	(1-1) (3-1) (4-3) (4a-3) (5-4) (7-1) (7-3) (9-4) (12-4) (18-4) (18a-4)
nted letter the child can verbal label.	A-1, 16-18	B-1, 14-15	(1-1) (3-1) (4-3) (4a-3) (5-4) (7-1) (7-3) (9-4) (14-1) (15-1) (18-4) (18a-4) (19-3)

Objective	Related Activities	Related Materials	M
6. Given a series of words presented orally, all beginning with the same letter, the child can make up another word or pick another word starting with the same letter.	A-1, 19-24	B-1, 16-20	
7. Given a spoken letter the child can select a set of pictures or objects beginning with that letter.	A-1, 25-31	B-1, 21-25	
8. The child can recite the alphabet.	A-1. 32-36	B-1, 26-29	
*9. The child will be able to form such basic symbols as letters.	A-1, 37-43	B-1, 30-35	
*10. The child can recognize and identify such basic symbols as letters by touch alone.	A-1, 44-47	B-1, 36-39	
B. NUMBERS			
1. Given a printed numeral the child can select the identical printed numeral from a set of printed numerals.	A-1, 48-51	B-1, 40-43	
2. Given a spoken numeral between 1 and 10 the child can select the appropriate numeral from a set of printed numerals.	A-1, 52-55	B-1, 44-46	
3. Given a printed numeral between 1 and 10 the child can provide the verbal label.	A-1, 56-58	B-1, 47-50	

	Related Activities	Related Materials	Mini Show(s)
ies of words presented beginning with the same child can make up another k another word starting me letter.	A-1, 19-24	B-1, 16-20	(1-1) (3-1) (5-4) (7-1)(7-3) (9-4) (13-1) (18-4) (18a-4) (19-3)
ken letter the child can t of pictures or objects ith that letter.	A-1, 25-31	B-1, 21-25	(1-1) (7-1) (13-1) (19-3)
an recite the alphabet.	A-1. 32-36	B-1, 26-29	(3-1) (5-4) (7-1) (7-3) (18-4) (18a-4)
ill be able to form such ls as letters.	A-1, 37-43	B-1, 30-35	(1-1) (7-1) (12-4) (15-1)
an recognize and identify symbols as letters by touch	A-1, 44-47	B-1, 36-39	(1-1) (7-1) (12-4)
nted numeral the child can identical printed numeral of printed numerals.	A-1, 48-51	B-1, 40-43	(2-1) (2-5) (5-1) (6-1) (8-1)
ken numeral between 1 and d can select the appropriate n a set of printed numerals.	A-1, 52-55	B-1, 44-46	(2-1) (2-5) (5-1) (6-1) (8-1) (11-1) (17-5)
nted numeral between 1 and d can provide the verbal	A-1, 56-58	B-1, 47-50	(2-1) (2-5) (5-1) (6-1) (8-1) (11-1) (17-5)

Objective	Related Activities	Related Materials
4. Given two unequal sets of objects each containing up to five members the child can select a set that contains the number requested by the examiner.	A-1, 59-61	B-1, 51-54
5. Given a set of objects the child can define a subset containing up to 10.	A-1, 62-64	B-1, 55-60
6. The child can count to 10.	A-1, 65-71	B-1, 61-65
*7. The child can speech read the numbers 1-10.	A-1, 72-75	
8. Given a starting point under ten, the child can count from that number to any given number up to ten.	A-1, 76-77	B-1, 66-67
*9. The child will be able to form such basic symbols as numbers.	A-1, 78-84	B-1, 68-69
*10. The child can recognize and identify such basic symbols as numbers by touch alone.	A-1, 85-88	B-1, 70-71
11. The child can recognize that the last number reached in counting is the total number in the set.	A-1, 89-90	B-1, 72-73
12. To use the phrase "One less than" appropriately to discriminate rhyming words.	A-1, 91-93	B-1, 74-75

	Related Activities	Related Materials	Mini Show(s)
unequal sets of objects each up to five members the child a set that contains the num- ted by the examiner.	A-1, 59-61	B-1, 51-54	(5-1) (8-1) (17-5)
t of objects the child can ubset containing up to 10.	A-1, 62-64	B-1, 55-60	(2-1) (5-1) (8-1) (11-1) (17-5)
can count to 10.	A-1, 65-71	B-1, 61-65	(2-1) (2-5) (5-1) (6-1)(8-1) (11-1) (15-2) (15-4) (17-5)
can speech read the numbers	A-1, 72-75		(2-5) (8-1)
rting point under ten, the ount from that number to umber up to ten.	A-1, 76-77	B-1, 66-67	(2-1) (6-1)
ill be able to form such ls as numbers.	A-1, 78-84	B-1, 68-69	(2-1) (8-1)
an recognize and identify symbols as numbers by touch	A-1, 85-88	B-1, 70-71	(2-1) (8-1)
an recognize that the last hed in counting is the total he set.	A-1, 89-90	B-1, 72-73	(2-1) (5-1) (6-1) (8-1)
phrase "One less than" ly to discriminate rhyming	A-1, 91-93	B-1, 74-75	(15-2) (15-4)

Objective	Related Activities	Related Materials	M
13. To identify sets of two.	A-1, 94-97	B-1, 76-77	
14. Conservation of Number. The child can match sets of equal number regardless of configuration.	A-1, 98-100	B-1, 78-80	
15. Numeral/Number Correspondence. The child can assign the correct numeral to sets of differing numbers.	A-1, 101-104	B-1, 81-84	
16. The child can perform the appropriate operations needed to balance an equation.	A-1, 105-106	B-1, 85-87	
C. GEOMETRIC FIGURES 1. Given a drawing or a cut-out of a circle, square or triangle, the child can select a matching drawing, cut-out or object from a set.	A-1, 107-111	B-1, 88-93	
2. Given the verbal label, "circle", "square" or "triangle", the child can select the appropriate drawing, cut-out or object from a set.	A-1, 112-116	B-1, 94-98	
*3. The child will be able to form such basic geometric shapes as a circle, a square, a triangle or a rectangle.	A-1, 117-123	B-1, 99-103	
*4. The child can recognize and identify such basic geometric shapes as a circle, a square, a triangle, or a rectangle, by touch alone.	A-1, 124-127	B-1, 104-106	

	Related Activities	Related Materials	Mini Show(s)
sets of two.	A-1, 94-97	B-1, 76-77	(12-1)
n of Number. The child ets of equal number re- configuration.	A-1, 98-100	B-1, 78-80	(2-1) (5-1) (6-1) (8-1)
ber Correspondence. The ssign the correct numeral differing numbers.	A-1, 101-104	B-1, 81-84	(2-1) (5-1) (6-1) (8-1) (11-1)
an perform the appropriate needed to balance an	A-1, 105-106	B-1, 85-87	(2-1) (5-1) (6-1) (8-1)
ES wing or a cut-out of a are or triangle, the child a matching drawing, cut- ct from a set.	A-1, 107-111	B-1, 88-93	(12-5)
erbal label, "circle", "triangle", the child the appropriate drawing, object from a set.	A-1, 112-116	B-1, 94-98	(10-1)
ll be able to form such tric shapes as a circle, a riangle or a rectangle.	A-1, 117-123	B-1, 99-103	(4-1) (4a-1) (10-1) (12-5)
an recognize and identify geometric shapes as a quare, a triangle, or a by touch alone.	A-1, 124-127	B-1, 104-106	(10-1) (12-5)

Objective	*Related Activities*	*Related Materials*
II. COGNITIVE PROCESSES The child can deal with objects and events in terms of certain concepts of order, classification and relationship; he can apply certain basic reasoning skills; and he possesses certain attitudes conducive to effective inquiry and problem solving.	A-2, 1-99	B-2, 1-103
A. PERCEPTUAL DISCRIMINATION 1. Body Percepts. The child can identify and label such parts of the body as the elbow, knee, lips and tongue.	A-2, 1-5	B-2, 1-5
2. Visual Discrimination a. The child can match a given object or picture to one of a varied set of objects or pictures which is similar in form, size or position.	A-2, 6-7	B-2, 6
b. Given a form, the child can find its counterpart embedded in a picture or drawing.	A-2, 8-10	B-2, 7
c. To name forms and to identify characteristics of forms.	A-2, 11-12	B-2, 8-9

	Related Activities	Related Materials	Mini Show(s)
with objects and events in ncepts of order, classifi- ship; he can apply certain lls; and he possesses cer- ucive to effective inquiry .	A-2, 1-99	B-2, 1-103	(1-2) (1-3) (2-2) (2-4) (3-2) (3-3) (4a-1) (4-1) (4a-2) (4-2) (5-2) (6-2) (6-3) (7-2) (7-4) (8-3) (8-4) (9-1) (9-2) (10-2) (10-4) (11-2) (11-3) (11-4) (12-2) (13-2) (14-1) (14-2) (14-4) (14-5) (15-2) (16-1) (16-3) (16-5) (17-3) (17-4) (18a-1) (18-1) (18a-2) (18-2) (18a-5) (18-5) (19-1) (19-3) (20-2) (20-3)
RIMINATION ts. The child can identify uch parts of the body as knee, lips and tongue.	A-2, 1-5	B-2, 1-5	(3-3) (16-5) (17-3)
rimination d can match a given object ure to one of a varied set cts or pictures which is in form, size or position.	A-2, 6-7	B-2, 6	(4-1) (4a-1) (6-3)
form, the child can find terpart embedded in a or drawing.	A-2, 8-10	B-2, 7	(4-1) (4a-1) (14-1) (14-5)
forms and to identify char- ics of forms.	A-2, 11-12	B-2, 8-9	(6-2) (14-4)

Objective	Related Activities	Related Materials
d. Labeling. Given a drawing, cut-out or object in the shape of a circle, square or rectangle, the child can provide a verbal label for that shape.	A-2, 13-14	B-2, 10-12
e. Recognition. Given the verbal label "circle", "square", "triangle" or "rectangle", the child can select the appropriate drawing, cut-out or object from a set.	A-2, 15	B-2, 13-14
f. The child can structure parts into a meaningful whole.	A-2, 16-19	B-2, 15-19
g. To match or to relate a particular view of an object with the entire object.	A-2, 20-21	B-2, 20-24
3. Auditory Discrimination a. Initial Sounds. The child can match words on the basis of common initial sounds.	A-2, 22-23	B-2, 25-30
b. Sound Identification. The child can associate given sounds with familiar objects or animals.	A-2, 24-27	B-2, 31-35
c. Copying Rhythms. The child can copy a rhythmic pattern.	A-2, 28-32	B-2, 36

	Related Activities	Related Materials	Mini Show(s)
g. Given a drawing, cut-out ct in the shape of a circle, or rectangle, the child can a verbal label for that shape.	A-2, 13-14	B-2, 10-12	(4-1) (4a-1) (6-4)
tion. Given the verbal label ", "square", "triangle" or gle", the child can select ropriate drawing, cut-out or from a set.	A-2, 15	B-2, 13-14	(4-1) (4a-1)
ld can structure parts into ngful whole.	A-2, 16-19	B-2, 15-19	(4-1) (4a-1) (4-2) (4a-2) (7-2) (8-4) (9-2) (14-5) (16-1) (16-2) (18-1) (18a-1)
or to relate a particular an object with the entire	A-2, 20-21	B-2, 20-24	(17-4) (18-1) (18a-1)
crimination Sounds. The child can ords on the basis of common sounds.	A-2, 22-23	B-2, 25-30	(10-4) (13-1)
lentification. The child ciate given sounds with objects or animals.	A-2, 24-27	B-2, 31-35	(10-2) (10-4) (14-2) (16-1)
Rhythms. The child can copy ic pattern.	A-2, 28-32	B-2, 36	(16-1)

Objective	Related Activities	Related Materials
B. RELATIONAL CONCEPTS 1. Size Relationships. Big, bigger, biggest; short, tall; skinny, little; etc.	A-2, 33-35	B-2, 37-41
2. Positional Relationships. Under, over, on top of, beneath, above, below, etc.	A-2, 36-40	B-2, 42-46
3. Distance Relationships. Near, far away, close to, next to, etc.	A-2, 41	B-2, 47
4. To differentiate between real and imaginary.	A-2, 42-43	B-2, 48
5. To place an object on the "inside" on printed or verbal command.	A-2, 44	B-2, 49-51
C. CLASSIFICATION 1. Given at least two objects that define the basis of grouping, the child can select an additional object that "goes with them" on the basis of: -Size: Height, length -Form: Circular, square, triangular -Function: To ride in, to eat, etc. -Class: Vehicles, animals, etc.	A-2, 45-49	B-2, 52-58
2. Given four objects, three of which have an attribute in common, the child can sort out the inappropriate object on the basis of: -Size: Height, length -Form: Circular, square, triangular -Function: To ride in, to eat, etc. -Class: Vehicles, animals, etc.	A-2, 50-52	B-2, 59-63

	Related Activities	Related Materials	Mini Show(s)
PTS nships. Big, bigger, big- tall; skinny, little; etc.	A-2, 33-35	B-2, 37-41	(2-4) (17-4)
elationships. Under, over, eneath, above, below, etc.	A-2, 36-40	B-2, 42-46	(3-3) (8-3) (11-3) (17-3)
ationships. Near, far to, next to, etc.	A-2, 41	B-2, 47	(17-4)
iate between real and	A-2, 42-43	B-2, 48	(4-4) (4a-4)
object on the "inside" on erbal command.	A-2, 44	B-2, 49-51	(1[illegible]-3)
st two objects that define grouping, the child can ditional object that "goes n the basis of: ht, length ular, square, triangular To ride in, to eat, etc. icles, animals, etc.	A-2, 45-49	B-2, 52-58	(11-2) (13-2) (16-3) (18-5) (18a-5)
bjects, three of which have in common, the child can inappropriate object on : ht, length ular, square, triangular To ride in, to eat, etc. icles, animals, etc.	A-2, 50-52	B-2, 59-63	(1-2) (5-2) (6-2) (7-4) (14-4) (15-2) (19-3) (20-3)

Objective	Related Activities	Related Materials
3. Given 2 or more pairs of objects, the child can group the pairs approximately.	A-2, 53-56	B-2, 64-69
4. Given objects and containers of different sizes, the child can make appropriate correspondence.	A-2, 57-60	B-2, 70-71
5. The child can verbalize the basis for grouping and sorting.	A-2, 61-62	B-2, 72-73
6. To group by same and different.	A-2, 63-68	B-2, 74-75
7. Same/Different. This concept underlies all of the following relational concept categories; size, quantity, position, distance, sequence.	A-2, 69-70	B-2, 76-80
D. ORDERING 1. Given pictures of the earliest and the latest of five events in a logically ordered temporal sequence, the child can insert pictures of the intermediate events in their proper order.	A-2, 71-73	B-2, 81-82
E. REASONING AND PROBLEM SOLVING 1. Inferences and Causality a. Given a situation, the child can infer probable antecedent events.	A-2, 74-76	B-2, 83-84
b. Given a situation, the child can infer probable consequent events.	A-2, 77-81	B-2, 85-87

	Related Activities	Related Materials	Mini Show(s)
ore pairs of objects, the oup the pairs approxi-	A-2, 53-56	B-2, 64-69	(1-3)
s and containers of differ- he child can make appropri- ndence.	A-2, 57-60	B-2, 70-71	(1-3)
n verbalize the basis for sorting.	A-2, 61-62	B-2, 72-73	(1-2) (5-2) (9-1) (16-3) (18-5) (18a-5) (19-3)
same and different.	A-2, 63-68	B-2, 74-75	(1-2) (20-3)
nt. This concept under- the following relational gories; size, quantity, stance, sequence.	A-2, 69-70	B-2, 76-80	(2-4) (4-1) (4a-1)
es of the earliest and the ve events in a logically oral sequence, the child ictures of the intermed- in their proper order.	A-2, 71-73	B-2, 81-82	(3-2) (9-1)
OBLEM SOLVING nd Causality situation, the child can obable antecedent events.	A-2, 74-76	B-2, 83-84	(11-4) (12-2)
situation, the child can obable consequent events.	A-2, 77-81	B-2, 85-87	(1-3) (2-2) (11-3) (11-4) (12-2) (13-2) (19-1)

Objective	Related Activities	Related Materials
c. To order a series of pictures so that they tell a logical story.	A-2, 82-83	B-2, 88-89
d. To teach sequence.	A-2, 84-87	B-2, 90-93
e. Ordering on the basis of causality. Given two or more events which are causally related, the child can place them in their appropriate causal order.	A-2, 88	B-2, 94-95
2. Generating and Evaluating Explanations and Solutions.		
a. The child can suggest multiple solutions to simple problems.	A-2, 89-90	B-2, 96
b. Given a set of suggested solutions to a simple problem, the child can select the most relevant, complete or efficient.	A-2, 91-92	B-2, 97
3. Attitudes toward Inquiry and Problem Solving		
a. Persistence. The child persists in his efforts to solve problems and understand events despite early failures.	A-2, 93	B-2, 98
b. Reaction to lack of knowledge. The child exhibits no undue frustration or embarrassment when he must admit to a reasonable lack of knowledge or when he must ask questions.	A-2, 94	B-2, 99

	Related Activities	Related Materials	Mini Show(s)
r a series of pictures so ey tell a logical story.	A-2, 82-83	B-2, 88-89	(3-2)
h sequence.	A-2, 84-87	B-2, 90-93	(3-2) (13-1)
g on the basis of causality. wo or more events which are y related, the child can hem in their appropriate order.	A-2, 88	B-2, 94-95	(12-2)
and Evaluating Explanations ns. ld can suggest multiple ns to simple problems.	A-2, 89-90	B-2, 96	(6-3) (7-4) (12-2) (13-2) (19-1)
set of suggested solutions mple problem, the child can the most relevant, complete cient.	A-2, 91-92	B-2, 97	(1-3) (2-2) (11-3) (12-2) (13-2) (16-3) (18-2) (18a-2) (19-1) (20-2)
oward Inquiry and Problem ence. The child persists efforts to solve problems erstand events despite early s.	A-2, 93	B-2, 98	(3-3) (6-3) (11-3) (12-2) (17-3) (18-2) (18a-2) (20-2)
n to lack of knowledge. ld exhibits no undue frus- or embarrassment when he mit to a reasonable lack of ge or when he must ask ns.	A-2, 94	B-2, 99	(3-3) (12-2) (17-3)

Objective	Related Activities	Related Materials	
c. Impulse Control. The child understands that reflection and planning may pay off where premature problem attack will not.	A-2, 95	B-2, 100	(
d. To formulate hypotheses on the basis of partial information.	A-2, 96-97	B-2, 101	(
e. Generating Explanations and Solutions. Given a familiar problem, the child can provide adequate explanations and solutions to that problem.	A-2, 98	B-2, 102	(
f. Evaluating Explanations and Solutions. Given several possible explanations or solutions to a problem, the child can evaluate these solutions in reality (trial and error) or in his mind (pretesting). When presented with alternative solutions he can select the best one.	A-2, 99	B-2, 103	(

	Related Activities	Related Materials	Mini Show(s)
Control. The child under- hat reflection and planning off where premature problem ill not.	A-2, 95	B-2, 100	(3-3) (12-2) (17-3)
late hypotheses on the basis al information.	A-2, 96-97	B-2, 101	(4-2) (4a-2)
ng Explanations and Solutions. familiar problem, the child ide adequate explanations tions to that problem.	A-2, 98	B-2, 102	(11-4)
ng Explanations and Solutions. veral possible explanations ions to a problem, the child uate these solutions in (trial and error) or in his etesting). When presented ernative solutions he can he best one.	A-2, 99	B-2, 103	(11-4)

Objective	Related Activities	Related Materials	Ma
III. THE PHYSICAL ENVIRONMENT The child's conception of the physical world should include general information about natural phenomena, both near and distant; about certain processes which occur in nature; about certain interdependencies which relate various natural phenomena; and about the ways in which man explores and exploits the natural world.	A-3, 1-120	B-3, 1-128	(((((((
A. THE NATURAL ENVIRONMENT 1. Land, Sky and Water. a. The child should realize that the earth is made of land and water, and that the earth's surface differs in various places.	A-3, 1-7	B-3, 1-6	((
b. The child can identify mountains and rocks although they differ in size and shape.	A-3, 8-11	B-3, 7-10	(
c. The child can identify and give salient facts about objects seen in the sky.	A-3, 12-16	B-3, 11-14	(
2. City and Country a. The child can distinguish the environment and natural life of the city from that of the country.	A-3, 17-21	B-3, 15-20	(1
*b. The child can recognize and find such basic geometric forms as circles, squares, triangles or rectangles in his environment.	A-3, 22-24	B-3, 21-24	(6

	Related Activities	Related Materials	Mini Show(s)
NMENT ion of the physical world ral information about both near and distant; ses which occur in nature; dependencies which relate omena; and about the ways s and exploits the natural	A-3, 1-120	B-3, 1-128	(1-4)(2-3)(2-4)(3-3)(4a-4) (4-4)(5-3)(5-5)(6-4)(8-2) (8-5)(9-3)(10-3)(12-3)(13-1) (13-3)(14-3)(15-3)(16-2)(16-4) (17-1)(17-2)(17-3)(17-4) (18a-3)(18-3)(19-2)(19-4) (19-5)(20-1)(20-4)(20-5)
IRONMENT d Water. d should realize that the made of land and water, the earth's surface differs us places.	A-3, 1-7	B-3, 1-6	(4-4) (4a-4) (13-3) (17-1) (17-4) (20-5)
d can identify mountains s although they differ in shape.	A-3, 8-11	B-3, 7-10	(17-1) (17-4) (20-5)
d can identify and give facts about objects seen ky.	A-3, 12-16	B-3, 11-14	(17-1) (17-4) (20-5)
ntry d can distinguish the en- t and natural life of the n that of the country.	A-3, 17-21	B-3, 15-20	(15-3) (16-2) (17-1) (20-5)
d can recognize and find ic geometric forms as squares, triangles or es in his environment.	A-3, 22-24	B-3, 21-24	(6-4) (12-5)

Objective	Related Activities	Related Materials	M
3. Plants and Animals.			
a. The child can classify a group of objects as plants although they differ in size, shape and appearance.	A-3, 25-29	B-3, 25-27	
b. The child can tell the difference between living and non-living things.	A-3, 30-33	B-3, 28-30	
c. The child can tell that plants are living things and that they require sun and water to grow and live.	A-3, 34-39	B-3, 31-33	
d. The child can name some plants that are grown and eaten by man.	A-3, 40-44	B-3, 34-37	
e. The child can classify a group of objects as animals although they vary in size, shape and appearance.	A-3, 45-53	B-3, 38-44	
f. The child can tell that animals are living things and that they need food and water to grow and live.	A-3, 54-57	B-3, 45-50	
g. The child can associate certain animals with their homes.	A-3, 58-63	B-3, 51-59	
h. To enjoy and handle animals with care.	A-3, 64-67	B-3, 60-63	

	Related Activities	Related Materials	Mini Show(s)
nimals.			
d can classify a group of as plants although they n size, shape and appear-	A-3, 25-29	B-3, 25-27	(5-3) (16-2) (17-1) (20-5)
d can tell the difference living and non-living things.	A-3, 30-33	B-3, 28-30	(4-4) (4a-4)
d can tell that plants are hings and that they require water to grow and live.	A-3, 34-39	B-3, 31-33	(5-3) (16-2) (17-1) (20-5)
d can name some plants that n and eaten by man.	A-3, 40-44	B-3, 34-37	(5-3) (16-. , (17-1) (20-5)
d can classify a group of as animals although they size, shape and appearance.	A-3, 45-53	B-3, 38-44	(2-3) (2-4) (4-4) (4a-4) (5-5) (10-3) (12-3) (16-4) (17-1) (18-3) (18a-3) (19-2) (19-4) (19-5) (20-1) (20-5)
d can tell that animals ng things and that they d and water to grow and	A-3, 54-57	B-3, 45-50	(2-3) (2-4) (5-5) (10-3) (12-3) (16-4) (17-1) (18-3) (18a-3) (19-2) (19-4) (19-5) (20-1) (20-5)
d can associate certain with their homes.	A-3, 58-63	B-3, 51-59	(2-3) (2-4) (4-4) (4a-4) (5-5) (10-3) (12-3) (16-4) (17-1) (18-3) (18a-3) (19-2) (19-4) (19-5) (20-1) (20-5)
and handle animals with	A-3, 64-67	B-3, 60-63	(2-3) (19-4) (19-5)

Objective	Related Activities	Related Materials	M
4. Natural Processes and Cycles.			
a. Given pictures of various kinds of young, the child can tell what they will be when they grow up.	A-3, 68-70	B-3, 64-69	
b. The child can identify such seeds as corn, acorn, bean and knows that after one of these has been planted, a new plant will grow.	A-3, 71-73	B-3, 70-73	
c. The child can identify birth, growth, aging and death as stages in the life process of individual plants and animals.	A-3, 74-77	B-3, 74-79	
d. The child can identify and label such parts of the body as the elbow, knee, lips and tongue.	A-3, 78-82	B-3, 80-85	
5. Weather and Seasons.			
a. The child can describe the weather and activities which are associated with summer and winter.	A-3, 83-87	B-3, 86-90	
B. THE MAN-MADE ENVIRONMENT			
1. Machines.			
a. The child can identify automobiles, trucks, buses, airplanes and boats, and can tell where and how each is used.	A-3, 88-92	B-3, 91-97	

	Related Activities	Related Materials	Mini Shows
cesses and Cycles. ictures of various kinds of the child can tell what ll be when they grow up.	A-3, 68-70	B-3, 64-69	(13-1) (17-1) (20-4) (20-5)
ld can identify such seeds , acorn, bean and knows that ne of these has been plant- ew plant will grow.	A-3, 71-73	B-3, 70-73	(17-1) (20-5)
ld can identify birth, aging and death as stages life process of individual and animals.	A-3, 74-77	B-3, 74-79	(17-1) (20-5)
ld can identify and label rts of the body as the knee, lips and tongue.	A-3, 78-82	B-3, 80-85	(5-5) (16-4) (20-1)
Seasons. ld can describe the weather ivities which are associated mmer and winter.	A-3, 83-87	B-3, 86-90	(13-3)
VIRONMENT ld can identify automobiles, buses, airplanes and boats, tell where and how each is	A-3, 88-92	B-3, 91-97	(1-4) (8-2) (8-5) (9-3) (14-3) (17-2)

Objective	Related Activities	Related Materials
b. The child can identify such common tools as a hammer and saw, and can tell how each is used.	A-3, 93-96	B-3, 98-102
*c. The child can simulate the movements of common machines.	A-3, 97-100	B-3, 103-105
*d. The child can identify the uses and functions of magnets.	A-3, 101-104	B-3, 106-110
e. The child can identify basic appliances such as refrigerator, record player and stove, and can tell how each is used.	A-3, 105-107	B-3, 111-112
2. Buildings and Other Structures.		
a. The child can identify some of the different types of building which serve as family homes, schools and stores.	A-3, 108-110	B-3, 113-116
b. The child can identify some of the materials used in building such as bricks, wood and concrete.	A-3, 111-112	B-3, 117-120
c. The child can identify as man-made such structures as bridges, dams, streets and roads.	A-3, 113-114	B-3, 121-122
d. The child can identify wheels in man-made objects.	A-3, 115-120	B-3, 123-128

	Related Activities	Related Materials	Mini Show(s)
ld can identify such common s a hammer and saw, and can y each is used.	A-3, 93-96	B-3, 98-102	(3-3) (8-2) (8-5) (9-3) (17-2) (17-3)
ld can simulate the move- f common machines.	A-3, 97-100	B-3, 103-105	(3-3) (8-2) (8-5) (17-2) (17-3)
ld can identify the uses ctions of magnets.	A-3, 101-104	B-3, 106-110	(8-2) (17-2)
ld can identify basic ces such as refrigerator, layer and stove, and can y each is used.	A-3, 105-107	B-3, 111-112	(8-2) (8-5) (17-2)
ld Other Structures.			
ld can identify some of the t types of building which family homes, schools and	A-3, 108-110	B-3, 113-116	(6-4)
ld can identify some of the s used in building such as wood and concrete.	A-3, 111-112	B-3, 117-120	(6-4)
ld can identify as man-made uctures as bridges, dams, and roads.	A-3, 113-114	B-3, 121-122	(6-4)
ld can identify wheels in objects.	A-3, 115-120	B-3, 123-128	(1-4) (14-3)

Objective	Related Activities	Related Materials
IV. THE SOCIAL ENVIRONMENT The child can identify himself and other familiar individuals in terms of role-defining characteristics. He is familiar with forms and functions of institutions which he may encounter. He comes to see situations from more than one point of view, begins to see the necessity for certain social rules, particularly those insuring justice and fair play.	A-4, 1-19	B-4, 1-18
A. SOCIAL UNITS 1. Roles. a. Given the name of certain roles from the family, neighborhood, city or town, the child can enumerate appropriate responsibilities.	A-4, 1-6	B-4, 1-8
B. SOCIAL INTERACTIONS 1. Cooperation. a. The child recognizes that in certain situations it is beneficial for two or more individuals to work together toward a common goal.	A-4, 7-10	B-4, 9-11
b. To develop a sense of humor in humorous situations. Humor in terms of: inconsistent responses, incorrect responses, irony.	A-4, 11-12	B-4, 12-13
c. To enjoy.	A-4, 13-19	B-4, 14-18
d. To enjoy music.		

*Teacher-made Objectives

	Related Activities	Related Materials	Mini Show(s)
MENT ify himself and other famil- terms of role-defining e is familiar with forms stitutions which he may en- to see situations from more iew, begins to see the in social rules, particularly ice and fair play.	A-4, 1-19	B-4, 1-18	(2-4) (4a-2) (4-2) (9-3) (10-3) (11-4)
he name of certain roles e family, neighborhood, town, the child can te appropriate responsibili-	A-4, 1-6	B-4, 1-8	(2-4) (4-2) (4a-2) (9-3) (10-3) (11-4)
IONS . ld recognizes that in cer- tuations it is beneficial or more individuals to gether toward a common goal.	A-4, 7-10	B-4, 9-11	(11-3) (19-1)
lop a sense of humor in situations. Humor in f: inconsistent responses, t responses, irony.	A-4, 11-12	B-4, 12-13	(12-2)
.	A-4, 13-19	B-4, 14-18	(12-3)
music.			(16-1)

*Teacher-made Objectives

END

DEPT. OF HEW

NAT'L INSTITUTE OF EDUCATION

ERIC

DATE FILMED

OCT 10 75